

DEPARTMENT OF THE ARMY  
U. S. Army Corps of Engineers  
Washington, D. C. 20314-1000

CECW-B

Circular  
No. 11-2-181

31 March 2001

EXPIRES 31 MARCH 2002  
Army Programs  
CORPS OF ENGINEERS CIVIL WORKS DIRECT PROGRAM  
PROGRAM DEVELOPMENT GUIDANCE  
FISCAL YEAR 2003

1. **Purpose.** This Engineer Circular (EC) provides guidance for development and submission of the Corps of Engineers direct Civil Works Program for Fiscal Year 2002~~3~~ (FY02~~3~~) and appropriate outyear periods. For programs with studies and projects, i. e., the General Investigations (GI); Construction, General (CG); Operation and Maintenance, General (O&M); and Flood Control, Mississippi River and Tributaries Project (MR&T) programs; and Formerly Utilized Sites Remedial Action Program (FUSRAP), the total period is ten years. For programs of an administrative nature, i. e., the General Expenses (GE), Flood Control and Coastal Emergencies (FC&CE), Regulatory Program, and Plant Replacement and Improvement Program (PRIP) part of the Revolving Fund (RF), the total periods are shorter. Specifically excluded from coverage are most research and development activities, including RF activities (excepting PRIP activities), and mandatory activities, such as those funded by Permanent Appropriations (PA), ~~and activities funded by the Coastal Wetlands Restoration Trust Fund (CWRTF).~~

2. **Applicability.** This EC applies to all headquarters elements, major subordinate commands (MSCs) districts, and field support activities having Civil Works Program responsibilities.

3. **References.**

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|----------------|---|
| a.             | Budget of the United States Government, Fiscal Year 2004 <del>2</del> , Analytical Perspectives   |
| b.             | <del>Web site, <a href="http://155.75.78.40/acrobat.htm">http://155.75.78.40/acrobat.htm</a>, subject: Adobe Acrobat program package and instructions for downloading to personal computers.</del> Budget of the United States Government, Fiscal Year 2002, Appendix |
| c.             | PL 84-99 <u>Flood Control and Coastal Emergencies</u>   |
| d.             | PL 91-190 <u>National Environmental Policy Act of 1969</u>  |
| <del>de.</del> | PL 92-500 <u>Federal Water Pollution Control Act Amendments of 1972</u>   |
| f.             | PL 93-251 <u>Water Resources Development Act of 1974</u>  |
| eg.            | PL 97-348 <u>Coastal Barrier Resources Act</u>  |
| fh.            | PL 99-662 <u>Water Resources Development Act of 1986</u>  |
| i.             | PL 100-676 <u>Water Resources Development Act of 1988</u>   |
| gj.            | PL 101-508 <u>Revenue Reconciliation Act of 1990</u>  |
| <del>hk.</del> | PL 101-591 <u>Coastal Barrier Improvement Act of 1990</u>   |
| il.            | PL 101-601 <u>Native American Graves Protection and Repatriation Act</u>  |
| m.             | PL 101-640 <u>Water Resources Development Act of 1990</u>   |
| jn.            | PL 102-580 <u>Water Resources Development Act of 1992</u>   |
| <del>ko.</del> | PL 103-62 <u>Government Performance and Results Act of 1993</u>   |
| p.             | PL 104-303 <u>Water Resources Development Act of 1996</u>   |
| lq.            | PL 105-33 <u>Balanced Budget Act of 1997</u>  |
| r.             | PL 106-53 <u>Water Resources Development Act of 1999</u>  |
| s.             | PL 106-541 <u>Water Resources Development Act of 2000</u>   |
| <del>mt.</del> | EO 11514 <u>Protection and Enhancement of Environmental Quality</u>   |
| <del>nu.</del> | EO 12088 <u>Federal Compliance with Pollution Control Standards, 1978</u>   |

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This EC supersedes EC 11-2-177~~9~~, dated 31 Mar 99~~00~~.

EC 11-2-181  
31 Mar 01

<u>ev.</u>	EO 12512	<u>Federal Real Property Management, 1985</u>
<u>pw.</u>	EO 12856	<u>Federal Compliance with Right-To-Know Laws and Pollution Prevention Requirements</u>
<u>qx.</u>	EO 12893	<u>Principles for Federal Infrastructure Investment</u>
<u>ry.</u>	EO 12906	<u>Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure</u>
<u>sz.</u>	OMB Circular A-11	<u>Preparation and Submission of Budget Estimates</u>
<u>saa.</u>	AR 11-2	<u>Management Control</u>
<u>tbb.</u>	AR 385-10	<u>Army Safety Program</u>
<u>ucc.</u>	EM 1110-1-2909	<u>Geospatial Data and Systems</u>
<u>vdd.</u>	ER 5-1-11	<u>Program and Project Management</u>
<u>wee.</u>	ER 11-1-320	<u>Civil Works Emergency Management Programs</u>
<u>xff.</u>	ER 11-2-220	<u>Civil Works Activities General Investigation</u>
<u>ygg.</u>	ER 11-2-240	<u>Civil Works Activities - Construction &amp; Design</u>
<u>zhh.</u>	ER 11-2-290	<u>Civil Works Activities, General Expenses</u>
<u>aii.</u>	ER 25-1-2	<u>Life Cycle Management of Automated Information Systems (AIS)</u>
<u>bbj.</u>	ER 37-2-10	<u>Accounting and Reporting Civil Works Activities</u>
<u>ekk.</u>	ER 1105-2-100	<u>Guidance for Conducting Civil Works Planning Studies</u>
<u>dell.</u>	ER 1110-1-8156	<u>Policies, Guidance, and Requirements for Geospatial Data and Systems</u>
<u>eemm.</u>	ER 1110-2-100	<u>Guidance for Conducting Civil Works Planning Studies</u>
<u>ffnn.</u>	ER 1110-2-1302	<u>Civil Works Cost Engineering</u>
<u>ggoo.</u>	ER 1130-2-500	<u>Partners and Support (Work Management Policies)</u>
<u>hhpp.</u>	ER 1130-2-510	<u>Hydroelectric Power Operations and Maintenance Policies</u>
<u>iiqq.</u>	ER 1130-2-540	<u>Environmental Stewardship Operations and Maintenance Policies</u>
<u>jjrr.</u>	ER 1165-2-119	<u>Modifications to Completed Projects</u>
<u>kkss.</u>	ER 1165-2-131	<u>Local Cooperation Agreements for New Start Construction Projects</u>
<u>lltt.</u>	ER 1165-2-400	<u>Recreational Planning, Development, and Management Policies</u>
<u>mmuu.</u>	EC 11-1-24	<u>USACE Manpower - Corps of Engineers - Manpower Requirements Systems</u>
<u>navv.</u>	EC 11-2-17480	<u>Army Programs - Availability, Obligation and Use of General Expenses and Other Civil Funds in Fiscal Year 2001</u>
<u>oeww.</u>	EC <del>25-1-276</del> 200-1-2	<u>FUSRAP Policy</u>
<u>pp</u>	EP <del>385-1-5</del>	<u>(non-existent)</u>
<u>qqxx.</u>	EP 1130-2-500	<u>Partners and Support (Work Management Guidance and Procedures)</u>
<u>yy.</u>	CECW_BA message	<u>Nilson, 25 May 01, subject: PRISM Info</u>

4. **Distribution.** This information is approved for public release. Distribution is unlimited.

5. **Conventions.** The following designations are used for selected one-year periods:

CCY = current calendar year  
 CFY = current fiscal year (extending from 1 October CCY to 30 September CCY+1 before 1 January, latest, and 1 October CCY-1 to 30 September CCY thereafter)  
 PY = program year (CFY+2 before 1 October, next, and CFY+1 thereafter) = FY02~~3~~  
 PY - 1 = one year before PY = FY04~~2~~  
 PY - 2 = two years before PY (CFY before 1 October, next, and CFY-1 thereafter) = FY00~~1~~  
 PY - 3 = three years before PY (CFY-1 before 1 October, next, and CFY-2 thereafter) = FY99~~00~~  
 PY + N = program year plus N fiscal years.

Note that 1 October of PY-1 is 1 October of CCY, until 1 January, next, when it becomes 1 October of

CCY-1.

## 6. Program Development.

### a. Government Performance and Results Act Guidance.

(1) **Guidance Development Status.** ~~Reference k, t~~ The "Government Performance and Results Act of 1993" (GPRA), PL 103-62, requires that agencies develop strategic plans, and annual performance plans and reports. Strategic plans are to cover a 5-year planning horizon beyond the program year and be updated every 3 years. Statutory requirements of GPRA apply at the Department of Defense level. But, as a matter of policy, the Office of Management and Budget (OMB) requires that the Corps' Civil Works Program comply with the requirements. GPRA stipulates that a consultation process with OMB and Congress must be completed before submission of any such strategic plan. Strategic Plans were submitted through OMB to Congress in August 1997 and again in March 1998. Consensus and agreement were not achieved among the Corps, OMB, and Congress on those two submissions. In August 1999 the Assistant Secretary of Army for Civil Works and the Chief of Engineers agreed on need to develop a new Civil Works Program Strategic Plan. In February 2001, Army submitted a draft new Civil Works Strategic Plan to OMB. OMB has expressed concerns with the new plan. Achieving agreement on the content of the plan awaits confirmation of a new Assistant Secretary of the Army for Civil Works. Completion of the new plan is not expected until late in 2000~~1~~; not in time to influence initial formulation of the FY02 program to be submitted to OMB in August. Implications of completing the plan later in the FY02 program development process will be worked out as coordination of the plan with OMB and Congress is accomplished.

(2) **Initial Guidance.** Appendix C provides guidance for program development for six business functions within the Civil Works Operations and Maintenance, General, Program (Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, Recreation, and National Emergency Preparedness Programs). The O&M organization successfully completed a results-oriented business program restructuring in 1996 as a Pilot GPRA Project for OMB. It is continuing to apply that structure for FY02 budget development.

### b. Presidential Policy.

(1) OMB maintains 10-year planning estimates, or ceilings, for each appropriation account of the Civil Works Program. The ceilings reflect long-term effects of the President's policies for the various programs, projects, and activities funded by each account, and serve as benchmarks for use in evaluating Congressional actions. The 10-year period approximates the implementation life of projects from start to finish, and accommodates adequate definition of long-term resource requirements. These ceilings are presented, in whole or in part, for all accounts in the appendices covering the accounts.

(2) Economic assumptions underlying Presidential policy of reference a are reflected in Table 1. These assumptions, along with related assumptions and data, are shown for PY-1 through PY+19. The assumptions and related data cover base rates for federal civilian permanent workers, reflecting pay and burden factors; pay raises for these workers applicable to both changing and fixed base rates; and inflation for "goods and services" of federal civilian temporary and nonfederal workers, and nonpay items.

(a) Base rates (against which pay raises apply) reflect assumed pre-raise pay and burden rates. Pre-raise pay rates are 1.000, by definition, for regular pay, and assumed to be 0.02 for awards. Assumed burden rates reflect assumed government contributions for worker benefits. The rates comprise two parts - one part for government contributions under the Civil Service Retirement System (CSRS); the other, under the Federal Employee Retirement System (FERS). The first part (including contributions for retirement, health insurance, Medicare, and life insurance) is shrinking, while the second part

(including contributions for regular, "Thrift Savings," and Old Age Survivors Disability Insurance (OASDI) retirement; health insurance; Medicare; and life insurance) is growing. This results from permanent force "attrition" and subsequent "turnover" through the hiring of more workers under FERS than under CSRS. With an annual permanent force attrition of 7 - 8% and associated turnover initially representing a considerable share of that, the CSRS part is expected to become negligible by FY20. Class 1 "updating factors" reflect the year-over-year change in base (resulting from change in burden), the associated year-over-year raises, and whatever raise absorption may pertain.

(b) Presidential policy pay raise assumptions for federal civilian permanent workers are shown in reference b, Table 1-1, ~~entitled~~ "Economic Assumptions." Assumed pay raise rates include base and locality components. (The base component is different from the base rate, discussed above, against which the base component applies.) Base components, reflecting the Employment Cost Index (ECI), apply nationally. Locality components, reflecting conditions of local markets, apply locally. Allocation of pay raise rates to base and locality components is based on the number and distribution of workers eligible for locality pay. For PY-2, the national allocation to these components was 0.03827 and 0.01, or 793% and 247% of the 0.04837 total raise rate. The national allocation for PY-1 has yet to be determined, therefore, the composite raise rate is used without refinement. Class 1 rates in Table 1 are based on composite raises for all years.

(c) Presidential policy inflation rates reflect assumed price increases for "goods and services" of temporary federal and nonfederal workers, and for nonpay items. The "Balanced Budget Enforcement Act of 1997," PL 105-33, requires that the Gross Domestic Product (GDP) fixed weight year-over-year rates be used to develop "baseline estimates" reflecting, instead of Presidential policy, continued operations under current law and current year appropriations. (The baseline program based on these estimates is discussed in OMB's Circular A-11, "Preparation and Submission of Budget Estimates." ~~reference s.~~) At the recommendation of OMB, "Federal Nondefense Nonresidential Structure Construction" rates were used as Class 2 rates of Table 1. Class 2 "updating factors" reflect the year-over-year inflation and whatever inflation absorption may pertain.

### c. **Army Policy.**

(1) All program support materials and documents will adhere to Army policy. Purposes to be considered include commercial navigation, flood damage reduction, including hurricane and storm damage reduction, and the restoration and protection of environmental resources, including fish and wildlife habitat, i. e., inland and coastal wetlands, other aquatic and riparian habitat, and upland and other terrestrial habitat. Hydropower, and/or municipal or industrial water supply, and/or recreation may be included only if provided in conjunction with commercial navigation or flood damage reduction.

(2) Programs for the EC, MR&T account will be developed in accordance with guidance provided for comparable programs of other accounts.

(3) For specifically authorized studies and projects the emphasis in the 10-year program is on maintaining continuity in the workflow once a new start decision has been made. In general, there are only two new start decision points for all Army proposed cost-shared projects - initiation of the reconnaissance phase study and project construction.

(4) Once the reconnaissance phase study is completed and the feasibility phase study has been initiated, follow-on work will be treated as continuing effort until a new construction start decision is made. If the project was not reviewed by Army or subject to efficiencies and controls of cost-sharing, a new start review and approval is needed for each, Preconstruction Engineering and Design (PED), and initiation of construction.

(5) Recommended new starts for major rehabilitation and dredged material disposal facilities projects will be included under the CG and MR&T accounts, and are discussed in Subappendix B-2. This emphasizes the importance of caring for existing facilities and that other types of new construction starts must compete with such projects for scarce resources in the future. Major rehabilitation and dredged material disposal facilities projects new starts will be characterized as construction-type new starts in testimony, press releases, and other communications. Ongoing major rehabilitation projects initiated between FY85 and FY91 will continue to be funded until fiscally complete under the O&M account. Program submission for these projects will be in accordance with procedures for continuing work in Subappendix C-2.

(6) The extent to which a study, project, or activity contributes to restoration or protection of environmental resources will influence the ranking of new start candidates, along with such other criteria as economics, engineering considerations, and sponsor support. Justified mitigation, restoration, and protection activities, fitting the definitions in Table 3 for these three categories, may be programmed. Consistent with the Water Resources Development Act of 1996 (WRDA 96), PL 99-662, proposals for restoration and protection generally require 35% local cost sharing in the implementation and full nonfederal operation and maintenance of the completed work. Justified mitigation measures will be cost shared to the same degree that other project costs are shared or reimbursed. The fish and wildlife restoration initiative does not change the formulation, justification, or cost sharing for mitigation in implementing a water resources development projects.

(7) A complete and reliable Micro-computer Assisted Cost Estimating System (M-CACES) baseline cost estimate and realistic workflow and funding schedule are essential to preparing a 10-year program. Projections of work and funding requirements will be based on the schedule last presented to Congress, extended as necessary by the project manager to include initiation and/or completion of construction. Such schedule extensions will reflect realistic expectations of the sponsor's financial capability. The funding schedules should be reviewed and adjusted continuously to reflect Congressional action, the sponsor's financial capability, and project progress.

### c. **Alternative Multiyear Programs.**

(1) OMB ceilings reflect intent of the President's 10-year program from a national perspective. However, the Corps may recommend its own program within the overall ceiling for the Civil Works Program and, therefore, still generally consistent with that perspective. To this end, it can select alternative work mixes and associated funding levels, by account, that best meet scheduled commitments, program priorities, and capabilities. Emphasis or de-emphasis of programs, projects, and activities should always provide for the most efficient and productive use of funds, with focus on work flow and physical progress.

(2) In the interest of developing an optimum Civil Works Program, each MSC must develop at least two alternative multiyear programs - a "baseline program," based on Presidential policy and a "capability program," based on capability-level production.

(a) **Baseline Program.** For each account, each MSC must develop a realistic, multiyear program reflecting PY-2 work allowances and projected current year appropriations; fitting within the OMB 10-year planning ceiling; and meeting further requirements for program formulation presented in the appendix covering the account. Absent Congressional action on PY-1 appropriations, assume that the President's PY-1 program will be enacted and that funds will be appropriated and made available by 1 October of the current year. (Note that this is not the same baseline program represented by "baseline estimates" required by ~~reference to~~ P.L. 101-508, and discussed in ~~reference to~~ OMB's Circular A-11.)

(b) **Capability Program.** For each of its GI, CG, and MR&T accounts, as applicable, each MSC

must develop a realistic multiyear program reflecting PY-2 work allowances and capability-level production. Additional new starts, non-cost-shared elements of studies and projects, separable elements, and restudies should be considered for this program. Any proposal to advance the latest schedule submitted to Congress for a particular study, project, or activity should be specifically identified. Supporting data should justify the need for the increase(s). Program year funding amounts for studies and projects of this program will be approved as program year capability amounts.

## 7. Cost Estimates.

a. **Economic Assumptions.** As explained above, the Administration's economic assumptions address inflation and adjustments through PY-1. Table 1 provides cost estimate updating rates based on these assumptions, extrapolated through PY+19. These rates may be extended beyond PY+19 using the procedures described in Footnote 16 of the table. They are used, as explained below, to update all study and project cost estimates.

b. **Updating.** As shown in Table 1, all costs of Corps work are grouped into just two "classes" - Class 1 and Class 2. Class 1 includes only costs of Corps civilian permanent workers. Class 2 includes all other costs, including costs of Corps civilian temporary workers. Each class has its own set of rates for cost estimate updating. Nevertheless, each set is used in the very same way - through execution of the "algorithm" described in the table. The two cost classes and their rates are discussed next.

(1) **Corps Civilian Permanent Worker Cost.** The Class 1 rates in Table 1 are applicable to the PY-1 pay raise base. They derive from "updating factors" incorporating effects of then-year pay raises and a changing pay raise base. The pay raises reflect standard nationwide pay raises and locality pay increments. The breakdown between the two is based on local pay gaps and must be determined each year. Use these rates to update Corps civilian permanent worker cost estimates for all programmed work of all studies, projects, and activities.

(2) **Corps Civilian Temporary and NonCorps Worker and Nonpay Cost.** The Class 2 rates of Table 1 are applicable to the PY-1 base of all costs other than those for Corps civilian permanent workers, ranging from costs of Corps civilian temporary workers, and consultants and AEs used in the various preconstruction planning and construction stages of work, to real estate costs. They derive from "updating factors" reflecting standard nationwide inflation. Use these rates to update Corps civilian temporary and nonCorps worker and nonpay cost estimates for all programmed work of all studies, projects, and activities.

## 8. Project Economics.

a. **Discount Rates.** A discount rate of 6 53/8% will be used to determine the "current" economics of any project. For projects funded for construction projects, the "applicable" rate is the one in effect when construction funds were first appropriated. For projects never funded for construction, the applicable rate is the "current" rate, unless the project qualifies for the 3 1/4% rate under the "grandfather" clause in Section 80 of the 1974 Water Resource Development Act of 1974, PL 93-251. Executive Order 12893, "Principles for Federal Infrastructure Investment," requires that benefits, costs, and benefit-cost ratios for new infrastructure investments of all federal agencies be evaluated at a discount rate of 7% to facilitate comparison and decisionmaking. This rate approximates the average real pretax return to capital in the private sector. The Corps' new infrastructure investments include new start regular construction projects, resumptions, unstarted projects, unstarted separable elements, and reconstruction projects.

### b. Evaluation.

(1) As required, in support of funding requests, benefit-cost ratios will be evaluated based on the

benefits in the latest approved official document, such as a Feasibility Report, Chief of Engineers Report, Limited or General Reevaluation Report (LRR or GRR), Engineering Documentation Report (EDR), or other report. In computing BCRs, deflate the current project costs to the price levels of such benefits.

(a) **New Start and Continuing PED Projects.** For new start PED projects, the fiscal year of the approval date of the latest economic analysis must not precede the fiscal year of the MSC program submission by more than 3 years. For example, for any new PED project recommended in your June submission, the approval date of the document containing the most recent economic analysis can be no earlier than 1 October CCY-4 - the first day of PY-5, which year precedes the fiscal year of your submission by 3 years. If the fiscal year of the approval date is more than 3 years ago, you must perform a reevaluation to show that the project remains justified. Such reevaluation will be the first item of work upon receipt of funds and will be documented in an LRR to be submitted in support of any request for follow-on funding. The reevaluation will involve no major new analysis. It will be limited to reviewing and updating previous assumptions and limited surveying, sampling, and application of other techniques to develop a reasonable estimate of project benefits. For any continuing PED project, in order to assure currency of economic justification and sponsor acceptance, the fiscal year of the date of the latest approved economic analysis, or update, must not precede the fiscal year of the MSC submission by more than 3 years. Provided updates are performed in accordance with the plan in the feasibility report and/or the Project Management Plan, MSCs may approve them.

(b) **New Start Construction Projects.** For any project or element proposed as a new construction start, the fiscal year of the approval date of the latest economic analysis must not precede the fiscal year of the MSC program submission by more than 3 years. For example, for any new start construction project or element in your initial submission, the approval date of the document containing the most recent economic analysis can be no earlier than 1 October CCY-4 - the first day of PY-5, which year precedes the fiscal year of your submission by 3 years. If the fiscal year of the approval date is more than 3 years ago, you must perform a reevaluation to show that the project remains justified. Such reevaluation will be the first item of work upon receipt of funds and will be documented in an LRR to be submitted in support of any request for follow-on funding. The reevaluation will involve no major new analysis. It will be limited to reviewing and updating previous assumptions and limited surveying, sampling, and application of other techniques to develop a reasonable estimate of project benefits. If the limited reevaluation uncovers major changes that could affect project formulation or sizing, then additional PED rather than construction funds must be requested to undertake a complete GRR.

(2) MSCs have approval authority for all LRRs and all other post-authorization documents for projects not requiring additional Congressional authorization and for which total federal costs do not exceed \$15 million. GRRs and GDMs for projects with total federal costs exceeding \$15 million must be approved by headquarters, U. S. Army Corps of Engineers (HQUSACE) (ATTN: CECW-P).

9. **Manpower.** No manpower data is required by this EC. CERM-M will use current resourcing standards of the EC 11-1-4, "USACE Manpower - Corps of Engineers - Manpower Requirements Systems," discussed in reference mm, and PY-2 through PY+3 workload to develop PY manpower requirements by appropriation account for the OMB program submission. In early CCY+1, once the President's Program has been resolved for PY, then manpower data compatible with ~~the program~~ the program will be input to CERM-M in accordance with the then current EC (to be published in January of CCY+1).

10. **Waivers.** All program submissions MUST comply with stated policy; however, MSCs are encouraged to request waivers, or clarification, as needed. Illustration 1 provides a standard format for requesting waivers. It has been filled in to show an example of the type of information which should be included in the request. Waivers may be requested to program for items which do not comply fully with guidance of this EC up until the supporting data required for the items is due.

## 11. Submissions.

a. **Summary.** Required MSC submissions, recipients, means of input, numbers of copies, and due dates are discussed at length in the appendices and summarized in Table 2. Due dates are designed to spread the workload. They must be met.

b. **Input Instructions.** Submissions are input electronically to ADP system databases, or to recipients by e-mail, file transfer protocol (FTP), or hardcopy. Input instructions are provided by various means, including, in addition to this EC, the OMABS, PRISM, and Requirement Statement Management System (RSMS) User's Manuals, and messages by e-mail or hardcopy.

(1) **ADP Databases.** Data is input to databases of up to four ADP systems. These include the Automated Information Systems Inventory System (AISIS), OMABS, PRISM, and RSMS. Data of AISIS and RSMS overlap somewhat, however, the focus of AISIS is requirements for existing AIS, whereas, the focus of RSMS is requirements for new automation systems or items.

(a) **AISIS.** Instructions for input to the AISIS database were provided by CEIM-L by memo of 5 Dec 95, subject: Automated Information System Inventory System (AISIS). These instructions cover input of Corps AIS requirements, both existing and new. Requirements include those of corporate systems (e. g., CEFMS, PRISM, etc.) and local systems (e. g., tasker tracking systems, etc.) for development, deployment, maintenance, upgrading, and/or replacement discussed in Appendix H. This database remains open, but input is required by the date shown under "Main Part" in Table 2.

(b) **OMABS.** Instructions for input to the OMABS database were recently provided by CECW-OM-B in the latest OMABS User's Manual. These instructions cover input for O&M activities of Appendix C (including non-CG major rehabilitation projects) and RP activities of Appendix F. (No such input is required for FC&CE activities of Appendix D). Help with instructions in this manual is available from each district's OMABS coordinator. This database is open; it will close on the date shown in Table 2.

(c) **PRISM.** Instructions for input to the PRISM database were provided by CECW-BA in reference yy. Additional guidance is available in the latest edition of will be provided by CECW-BA in the updated PRISM User's Manual on or about 1 May. These instructions cover input for GI and CG activities, comparable activities of the MR&T project, and GE activities of appendices A, B, and E, respectively, and the O&M major rehabilitation activity of Appendix C. This database is open; it will close on the various dates shown under "General Investigations," "Construction, General," "Operations and Maintenance, General," and "General Expenses" in Table 2.

(d) **RSMS.** Instructions for input to the RSMS database were provided by CEIM-L in the latest RSMS User's Manual. These instructions cover input of automation requirements, including new AIS (e. g., new corporate computer programs like FORCON), hardware (e. g., personal computers, monitors, printers, and teleconferencing equipment; etc.), and software (e. g., wordprocessor upgrades, etc.), discussed in Appendix H. This database remains open; but input is required by the date shown under "Automation Costs" in Table 2.

### (2) E-mail and FTP Data.

#### (a) Justification Statements and Books.

##### (i) General.

Complete your updates of illustrations A-2.1 through A-2.4, B-2.4, B-4, C-2.5a through C-2.5c, C-4, and I-1.1 of the appendices for GI, CG, O&M, FC,MR&T, and FUSRAP items, as applicable, by dates specified



in Table 2.

Use 10 point regular font of one kind only (such as Arial or Courier), automatic line height, line spacing of 1, and margins of 1" top and bottom, and 0.5" both sides. (In "File," "Page Setup," "Margins," set bottom margin at 1.5" and footer margin at 1.50" from bottom edge of page. This provides a 0.5" footer height for printing the footer and page number.) Number all pages at the bottom right.

Develop project completion schedules consistent with the President's budget funding amounts to be provided later, and reflect these schedules in your PB-2As by dates to be specified later. These schedules will be provided to the Appropriations Committees for the record. Do not show future advanced appropriations in the summarized financial data on your justification sheets. Prepare the summarized financial data in accordance with the examples in Illustration B-2.4 of Appendix B.

Major rehabilitation projects started after FY91 are part of the CG program; those started earlier are part of the O&M program.

Submit justification statements, as completed, via e-mail to Area Managers of CECW-BA, C, E, or W, as appropriate, for review. Coordinate e-mailing logistics with your Area Manager, beforehand.

**(ii) Initial Submission.**

Submit justification statements for GI, CG, and FC,MR&T new starts, only. For GI, these include reconnaissance, feasibility, and PED study new starts. For CG, these include major rehabilitation, reimbursement, resumption, deficiency correction, reconstruction, dredged material disposal facility, and unstarted projects, and unstarted separable elements new starts. For FC,MR&T, these include all of the above.

**(iii) Revised Submission.**

Between the times of the initial and Congressional submissions, revised submissions may be required for various reasons, including changes in funding for PY-1 effected by appropriations. Submit these as specifically requested later.

**(iv) Congressional Submission.**

The ultimate products of the justification development process are nine justification books for Congress - one for each division and one for Remaining Items. Each division is responsible for developing its own book using whatever software it chooses, such as computer-aided design (CAD) and Microsoft Word and Excel software. However, ultimately, each division must convert its book to an Adobe Acrobat 4.0 file for efficient electronic transmission and publication. In order to ensure that your book will "present" in the Adobe Acrobat file as it does in the development software file, you must select the Adobe Acrobat printer in the development software before finalizing your product in that software. For example, to ensure that what you see in Word is what you get in Adobe Acrobat, you must select "File," "Print," "Printer," "Acrobat PDFWriter" in Word before finalizing in Word. Doing this first of all will spare you untold lost time and frustration. Of course, if you want to print your finalized file at a local printer, simply select the printer and print, but do not modify the file while the local printer is selected.

In the table of contents, use lower case Roman numerals; on all other pages beginning with the summary, use Arabic numerals. On each page of the document and maps, show the date of Army's press conference (to be provided later) centered in the bottom margin, 1" from its bottom edge. Prepare status maps in accordance with reference y, except, do not include the disclosure statement noted in Appendix L, paragraph 1.

Justification documents for O&M major rehabilitation projects are the same (except Illustration B-2.1) as required for CG projects, including justification statements, status maps (included at the end of the O&M justification package), and PB-2As. For major rehabilitation of inland waterways locks and dams and associated structures, show half of funding from the Inland Waterway Trust Fund.

For other O&M projects, show funding for "operations" and "maintenance" work separately. Copy PY funding for these parts from guidance to be provided later, ensuring that the total of amounts copied matches your division's total. Update individual project amounts to reflect your latest projection of PY-1 obligations. (All of these amounts will be included in the OMABS database and accessible then.) Round all funding amounts to the nearest \$K. Add the following statement (less quotation marks) after the introductory paragraph for each category, as applicable:

"The requested amount includes an amount from the Special Recreation Use Fees Special Fund (SRUF) for recreation areas."

Include major rehabilitation requirements for projects as part of single line item entries on the justification of estimate statements with the following remark (less quotation marks) under "Reason for Change and Major Maintenance Items:"

"Includes Major Rehabilitation at \$XXX. See justification following this table."

Identify States for each of the following items: Scheduling Reservoir Operations, Inspection of Completed Works, Project Condition Surveys, and Surveillance of Northern Boundary Waters. If the cost for more than one State is attributable mostly to one State, show all cost for that State.

Submit these as specifically requested later. Submit final versions, printed front to back and collated into a single book (with a cover like last year's, including the disclosure statement, and paginated and dated table of contents, budget summary, and status maps, as applicable) in a single Adobe Acrobat 4.0 file. ~~Adobe Acrobat software and instructions for downloading to personal computers are available through reference b.~~

(b) **Other.** CECW-OM will provide instructions to cover FC&CE activities of Appendix D, requiring input by e-mail or FTP directly to that office by dates specified in Table 2.

(3) **Hardcopy Data.** Provide hardcopy items required (e. g., certifications, etc.) by dates specified in Table 2.

c. **Document Marking.** All submissions required by this EC are not to be released outside the Department of the Army. See ER 11-2-240, "Civil Works Activities - Construction & Design," Appendix L, paragraph 1, for instructions regarding the marking of documents for restricted distribution.

## 12. Environmental Program.

a. **Goal.** Restoring and protecting the environment, including ecosystem functions and values as well as plant and animal communities, is an important goal which the Corps is pursuing through its Civil Works studies, projects, and programs. Collection and updating of environmental data enables tracking progress in meeting this goal, as well as presentation of information on Civil Works environmental activities to OMB, Army officials, other agencies, and various congressional committees and public groups.

b. **Reporting Requirements.** Environmental reporting requirements are detailed in Executive

Orders and in OMB circulars and data requests. They are also detailed in the "U. S. Army Environmental Strategy Into the 21st Century," which categorizes environmental activities under the "four pillars" of compliance (pollution control); restoration (hazardous toxic and radiological waste (HTRW cleanup); prevention (recycling, contaminant reduction); and conservation (mitigation, ecosystem restoration, protection).

c. **Work Categories.** Environmental work may be funded under one or more of six categories defined, along with related activities, in Table 3. However, most will be funded under one of the first three categories, which are subdivided to allow tracking of various types of wetlands activities.

d. **Input Instructions.** Environmental program data is both project/activity-specific and programmatic. Project/activity-specific data are input electronically to databases of two ADP systems - PRISM and OMABS. Programmatic data (e. g., for the RP, Section 1135 and 307A, and Coastal Wetlands Restoration Trust Fund accounts) are developed at HQUSACE. Instructions for input of project/activity specific data are provided by various means, including, in addition to this EC, the PRISM and OMABS User's Manuals, and messages by E-mail or hardcopy. All input must be entered by the date shown in Table 2, under "Main Part".

(1) **PRISM.** The database of this system contains data on funding as it was appropriated for PY-2 and/or programmed for PY-1 for environmental activities in the GI, CG, and ~~FC~~MR&T accounts. Data for both PY-2 and PY-1 must be updated to reflect actual obligations and appropriations, and new data for the PY must be entered. The database includes two descriptive fields, one for PY-1 and another for the PY. Descriptions in these fields must explain concisely the work underway or scheduled, and identify quantitative and/or qualitative outputs that funding is to achieve (e. g., acres of wetland to be restored, acres of habitat to be acquired, nature of resource to be restored, protected, or mitigated). Descriptions must be complete and not refer to a previous year's description.

(2) **OMABS.** The database of this system contains data on environmentally-related categories of the O&M account, including but not limited to 605.1, 605.5, 607.12, 608, 624.2, and 621.16. These categories are defined in Appendix C, Table C-2.3.

13. **Balance-to-Complete Report.** Districts will update the Balance-to-Complete Report (PRISM/PBS Report 15) for PED and construction projects by the date shown under "Main Part" in Table 2. Records for active status PED and construction projects must include total estimated federal costs. (PED balances-to-complete must include the federal costs of PED plus construction.) Give special attention to active status PED and construction projects, as they are the subject of periodic Congressional questions on project balances-to-complete CECW-BA is the proponent of this report; however, CECW-BC/BE/BW area managers will review the contents of the report when necessary to meet requirements.

14. **Certifications of Compliance.** You must submit, to CECW-BD, at least two, and possibly four, certifications that your program submission complies with laws and an Executive Order. The two certifications always required include one by district commanders regarding compliance with an Executive Order on data sharing, and one by the MSC directors of programs management regarding compliance with law on use of management controls. The other two possibly required are both by district commanders - both regarding compliance with coastal barrier laws. Each certification is discussed below.

a. **Executive Order on Geospacial Data.** ER 1110-1-8156, "Policies, Guidance, and Requirements for Geospacial Data and Systems," and EM 1110-1-2909, "Geospacial Data and Systems," assist USACE in protecting its investment in geospacial data and systems and in complying with Executive Order 12906, ~~entitled~~ "Coordinating Geographic Data Acquisition and Access - The National Spatial Data Infrastructure (NSDI)." USACE collects a variety of geospacial data to produce products

such as river and harbor maps, charts, and drawings; real estate maps; environmental and economic studies; and engineering studies and drawings.

(1) Paragraph 7.g(4) of the ER explains that, beginning with the FY97 Civil Works program cycle, each district commander will submit a certification, modeled after Illustration 2, certifying that his command has documented new geospatial data that it has created and made this documentation (metadata) available via the National Geospatial Data Clearinghouse on the Internet. (Illustration 2 is included in Appendix B of the ER.) The certification is due by the date shown under "Main Part" in Table 2.

(2) Paragraph 8 of the ER explains that, beginning in the FY97 Civil Works Program cycle, USACE project engineers will include costs of complying with Executive Order 12906 in the mapping or other appropriate programs for civil works, military construction, and reimbursable projects. These costs are described in more detail in Chapters 3 through 9 of the EM and include making metadata files, inventorying old/archived geospatial data, and accessing the clearinghouse.

b. **Coastal Barrier Laws.** OMB's Circular A-11, ~~entitled "Preparation and Submission of Budget Estimates,"~~ Section 12.5(s) states that estimates must not include any new federal expenditures or financial assistance prohibited by the "Coastal Barrier Resources Act" (CBRA), PL 97-348). In addition, the "Coastal Barrier Improvement Act of 1990," (PL 101-591), amending CBRA, requires that the Corps certify annually to Congress and the Secretary of Interior that it was in compliance with the provisions of CBRA, as amended, during the previous fiscal year. Therefore, each District Commander whose district includes areas covered by the Coastal Barrier Resources System will submit two certifications - one modeled after each Illustration 3A and 3B certifying, respectively, that his program request is in compliance with these laws and that no funds were obligated in the past fiscal year (PY-2) for purposes prohibited by them. Note that PL 101-591 added new units to the Coastal Barrier Resources System. The certifications are due by dates shown under "Main Part" in Table 2.

c. **Management Control Law.** Federal agencies are required by law to establish "management controls" for the activities they manage, and to provide assessments of their effectiveness to the President and Congress, annually. To this end, functional proponents identify requirements for compliance with law, including safeguarding assets, ensuring adequate records, and promoting efficiency and effectiveness of program accomplishment, and reflect them in checklists. Army's management control effort, implemented by AR 11-2, "Management Control," specifically includes the Civil Works Program. The new management control checklist for Civil Works Program Development is provided as Illustration 4. This is for use by programs management organizations in MSCs and districts, as explained below:

(1) Use the checklist during development of your program submission. District commands will use it first; then MSCs, when reviewing and modifying district submissions.

(2) A "no" response to a checklist question *suggests a potential* management weakness. However, if it is the result of a special case or specific exception, then probably there is no management weakness. You are the judge. If you determine that a weakness exists, you must correct it as quickly as resources and essential mission priorities permit. No upward reporting is required.

(3) If a management weakness requires the attention or awareness of the next higher level of management, it is a "*material weakness*." This is a judgment call on the relative seriousness of the problem. It is made at each progressive echelon, based on each manager's professional judgment. Material weaknesses discovered by districts are reported to the MSCs, which determine whether to report them to CECW-BD. The reports must specify corrective actions taken or planned. The highest echelon receiving the report will evaluate the corrective actions, provide assistance, if needed, and track progress.

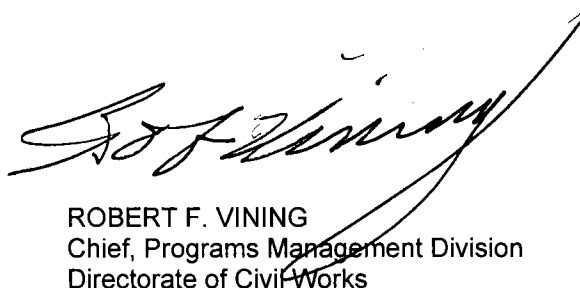
Consult AR 11-2 for help in determining whether a weakness is "material."

(4) Do not send checklists to HQUSACE.

Each MSC director of programs management will submit a certification, modeled after Illustration 5, certifying that the checklist was used by the districts, as applicable, and MSC. The certification is due by the date shown under "Main Part" in Table 2.

15. **Coordination.** The CECW staff will work closely with MSC office staffs throughout the program development process to assure that the CECW recommended program, as well as alternative programs, are thoroughly coordinated. Coordination will continue after receipt of OMB's passback and during development of Army's proposed appeal. The 10-year program will be revised, as necessary, to reflect resolution of the passback appeal and final President's Program.

FOR THE COMMANDER:



ROBERT F. VINING  
Chief, Programs Management Division  
Directorate of Civil Works

9 Appendices  
APP A - General Investigations  
APP B - Construction, General  
APP C - Operation and Maintenance, General  
APP D - Flood Control and Coastal Emergencies  
APP E - General Expenses  
APP F - Regulatory Program  
APP G - Revolving Fund (Plant Replacement and Improvement Program (PRIP))  
APP H - Automation Costs  
APP I - Formerly Utilized Sites Remedial Action Program

Table 1  
FY02 PROGRAM  
COST ESTIMATE UPDATING  
RATES

COST ITEM 1/			CY/FY																					
			00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21
			ECONOMIC ASSUMPTIONS 2/																					
Class 1																								
Base																								
Pay																								
Regular			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Awards			0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Total			1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
Burden 3/																								
CSRS																								
Retirement			0.085	0.085	0.075	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Health Insurance 4/			0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Medicare 5/			0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Life Insurance 6/			0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Total			0.152	0.152	0.142	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137	0.137
FERS																								
Retirement																								
Regular			0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107	0.107
Thrift Savings Plan																								
Basic			0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Match			0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Total			0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045
Old Age Survivors Disability Insurance			0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062
Health Insurance 4/			0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
Medicare 5/			0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Life Insurance 6/			0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Total			0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281	0.281
Composite																								
Force 7/																								
Total			24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725	24,725
Temporary			3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091	3,091
Permanent			21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634	21,634
Attrition 8/			0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
CSRS																								
Turnover 9/			0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Total			8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556	8,556
FERS																								
Anniversary 10/			16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Total			11,122	12,126	13,078	13,979	14,829	15,627	16,373	17,069	17,714	18,308	18,851	19,343	19,786	20,179	20,522	20,817	21,063	21,261	21,414	21,634	21,634	21,634
Allocation																								
CSRS			0.074	0.067	0.056	0.048	0.043	0.038	0.033	0.029	0.025	0.021	0.018	0.014	0.012	0.009	0.007	0.005	0.004	0.002	0.001	0.000	0.000	0.000
FERS			0.144	0.157	0.170	0.181	0.192	0.203	0.213	0.222	0.230	0.238	0.245	0.251	0.257	0.262	0.266	0.270	0.273	0.276	0.278	0.281	0.281	0.281
Total			0.218	0.224	0.226	0.230	0.235	0.241	0.246	0.250	0.255	0.259	0.262	0.266	0.268	0.271	0.273	0.275	0.277	0.278	0.279	0.281	0.281	0.281
Total (composite burden)			0.218	0.224	0.226	0.230	0.235	0.241	0.246	0.250	0.255	0.259	0.262	0.266	0.268	0.271	0.273	0.275	0.277	0.278	0.279	0.281	0.281	0.281
Total (burden)			0.218	0.224	0.226	0.230	0.235	0.241	0.246	0.250	0.255	0.259	0.262	0.266	0.268	0.271	0.273	0.275	0.277	0.278	0.279	0.281	0.281	0.281
Total (total pay and burden)			1.238	1.244	1.246	1.250	1.255	1.261	1.266	1.270	1.275	1.279	1.282	1.286	1.288	1.291	1.293	1.295	1.297	1.298	1.299	1.301	1.301	1.301
Raise 11/																								
Applicable to Then-year Base																								
Gross			0.048	0.037	0.037	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Absorption 12/			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net			0.048	0.037	0.037	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Applicable to PY-1 Base																								
Pay			0.048	0.037	0.037	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Burden			0.049	0.038	0.037	0.033	0.033	0.033	0.033	0.033	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Base			0.048	0.037	0.037	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Updating Factor 13/			0.053	0.042	0.038	0.035	0.037	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.034	0.034	0.034	0.034	0.033	0.033	0.033	0.032	0.032	0.032
Class 2																								
Inflation			0.027	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032
Absorption 12/			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Updating Factor 14/			0.027	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032									

Table 1  
FY02 PROGRAM  
COST ESTIMATE UPDATING  
RATES

COST ITEM 1/		CY/FY																					
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21
		SIMPLE 15/										COMPOUND 16/											
Class 1		1.038	1.049	1.045	1.086	1.125	1.166	1.208	1.252	1.297	1.343	1.391	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.002
Oct	17/	1.042	1.037	1.053	1.089	1.128	1.165	1.209	1.252	1.297	1.343	1.391	1.439	1.489	1.541	1.593	1.647	1.703	1.760	1.818	1.878	1.939	2.004
Nov		1.042	1.037	1.053	1.089	1.128	1.165	1.209	1.252	1.297	1.343	1.391	1.439	1.489	1.541	1.593	1.647	1.703	1.760	1.818	1.878	1.939	2.004
Dec		1.042	1.037	1.053	1.089	1.128	1.165	1.209	1.252	1.297	1.343	1.391	1.439	1.489	1.541	1.593	1.647	1.703	1.760	1.818	1.878	1.939	2.004
Jan		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Feb		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Mar		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Apr		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
May		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Jun		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Jul		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Aug	17/	1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Sep		1.037	1.053	1.042	1.085	1.124	1.166	1.208	1.252	1.297	1.343	1.390	1.439	1.489	1.540	1.593	1.647	1.702	1.759	1.817	1.877	1.939	2.001
Class 2		1.027	1.032	1.032	1.065	1.099	1.134	1.171	1.208	1.247	1.287	1.328	1.370	1.414	1.459	1.506	1.554	1.604	1.655	1.708	1.763	1.819	1.878
Oct	17/	1.003	1.003	1.035	1.068	1.102	1.137	1.174	1.211	1.250	1.290	1.331	1.374	1.418	1.463	1.510	1.558	1.608	1.660	1.713	1.768	1.824	1.883
Nov		1.005	1.005	1.038	1.071	1.105	1.140	1.177	1.214	1.253	1.293	1.335	1.378	1.422	1.467	1.514	1.563	1.613	1.664	1.717	1.772	1.829	1.888
Dec		1.008	1.008	1.040	1.074	1.108	1.143	1.180	1.218	1.257	1.297	1.338	1.381	1.425	1.471	1.518	1.567	1.617	1.669	1.722	1.777	1.834	1.893
Jan		1.043	1.076	1.111	1.146	1.181	1.216	1.251	1.286	1.320	1.355	1.390	1.425	1.460	1.495	1.532	1.571	1.613	1.656	1.701	1.746	1.792	1.839
Feb		1.046	1.079	1.114	1.149	1.184	1.219	1.254	1.289	1.324	1.359	1.394	1.429	1.464	1.499	1.534	1.569	1.604	1.639	1.674	1.709	1.744	1.780
Mar		1.016	1.016	1.048	1.080	1.112	1.144	1.176	1.208	1.240	1.272	1.304	1.336	1.368	1.400	1.432	1.464	1.496	1.528	1.560	1.592	1.624	1.656
Apr		1.019	1.019	1.051	1.083	1.115	1.147	1.179	1.211	1.243	1.275	1.307	1.339	1.371	1.403	1.435	1.467	1.499	1.531	1.563	1.595	1.627	1.659
May		1.021	1.021	1.053	1.085	1.117	1.149	1.181	1.213	1.245	1.277	1.309	1.341	1.373	1.405	1.437	1.469	1.501	1.533	1.565	1.597	1.629	1.661
Jun		1.024	1.024	1.056	1.088	1.120	1.152	1.184	1.216	1.248	1.280	1.312	1.344	1.376	1.408	1.440	1.472	1.504	1.536	1.568	1.600	1.632	1.664
Jul		1.027	1.027	1.059	1.091	1.123	1.155	1.187	1.219	1.251	1.283	1.315	1.347	1.379	1.411	1.443	1.475	1.507	1.539	1.571	1.603	1.635	1.667
Aug	17/	1.029	1.029	1.061	1.093	1.125	1.157	1.189	1.221	1.253	1.285	1.317	1.349	1.381	1.413	1.445	1.477	1.509	1.541	1.573	1.605	1.637	1.669
Sep		1.032	1.032	1.064	1.096	1.128	1.160	1.192	1.224	1.256	1.288	1.320	1.352	1.384	1.416	1.448	1.480	1.512	1.544	1.576	1.608	1.640	1.672

- 1/ Class 1 or Class 2. Class 1 includes "permanent" hired labor for items (including non-benefits items) and Class 2 includes all items including "temporary" hired labor and federal employees.
- 2/ Class 1 "raise" rates are effective for calendar year; Class 2 "inflation" rates are effective for fiscal year.
- 3/ Generally, fraction of total pay contributed by the government. For Class 1, use fractions of 1/3 for CSRS (Civil Service Retirement) and 2/3 for FERS (Federal Employees Retirement). For Class 2, use fraction of 1/3 for permanent labor.
- 4/ Not based on pay, however, expressed as fraction of pay.
- 5/ Based on "total" instead of "regular" pay; rates reflect adjustment for this.
- 6/ Only partially based on pay, however, expressed as fraction of "regular" pay.
- 7/ Manpower in fulltime equivalent employment years (FTEs).
- 8/ Fraction of permanent manpower lost, annually.
- 9/ Fraction of permanent manpower shifted (turned over) from CSRS to FERS coverage, annually.
- 10/ Number of FERS anniversary. (All federal permanent employees first hired after 1983 have been covered by FERS, created by Congress to bring federal workers under the Social Security System, beginning in 1984.)
- 11/ Applies to all permanent civilian workers, including SES, GM, GS, and Wage Board employees.
- 12/ Fraction of raise to be absorbed (not realized).
- 13/ Used in amounts of 1/4 for initial calendar year (CY) and 3/4 for final CY for any fiscal year (FY) of any period in calculating "Compound Rate" for final FY of the period. For example, in calculating the Class 1 compound rate for FY03, use rates for FY02 as follows:  $(1 + (1/4)(CY00 \text{ rate}) + (3/4)(CY01 \text{ rate}) + (3/4)(CY02 \text{ rate}) + (3/4)(0.042) + (3/4)(0.038)) = 1.086$ .
- 14/ Used for any FY of any period in calculating "Compound Rate" for final FY of the period. For example, in calculating the Class 2 compound rate for FY03, use rates for FY02 and 03 as follows:  $(1 + FY02 \text{ rate})(1 + FY03 \text{ rate}) = (1 + 0.032)(1 + 0.032) = 1.065$ .
- 15/ Use FY01 annual rates to update estimates based on 1 Oct 99 prices to get estimates based on 1 Oct 00 prices. Use monthly rates in accordance with Footnote 17. (See first two points of Algorithm, and Example 1.)
- 16/ Use annual rates to update estimates based on 1 Oct 00 prices to get estimates based on 1 Oct 01 prices for year of interest. Use monthly rates in accordance with Footnote 17. (See last two points of Algorithm, and Example 2 and 3.) Determine the rate for years beyond FY21 by multiplying the FY21 rate by:  $(1 + (FY21 \text{ rate} - FY20 \text{ rate})/(FY20 \text{ rate}))^n$  where n is the number of years beyond FY21. For example, determine the Class 1 rate for FY25 by evaluating:  $(2.002)/((1 + (2.002 - 1.939)/(1.939))^{4th \text{ power}}) = 2.271$ . Determine the Class 2 rate evaluating:  $(1.878)/((1 + (1.878 - 1.819)/(1.819))^{4th \text{ power}}) = 2.130$ .
- 17/ Class 1 monthly rates are nonapplicable individually. They are included only to show month-wise parts of annual updating factors, reflecting annual start-of-calendar-year raises applicable for the full year. Do not use them to update estimates. On the hand, Class 2 monthly rates are applicable individually. They reflect continually accruing inflation over the full year of interest. Use these to update estimates based on 1 Oct 99 prices to get estimates based on end-of-month prices for any month of interest. For improved accuracy, interpolate proportionally between successive rates.

Algorithm:

- o Update "work/workload." For each program/project/activity (PPA), revise the work/workload, as necessary, to best reflect reality.
- o Complete "base year cost estimates." For each PPA, given revised work/workload, inflate the cost estimate based on 1 Oct 99 prices to get the cost estimate based on 1 Oct 00 prices, by use of simple rates.
- o Update "execution schedules." For each PPA, revise the execution schedule to best reflect reality, spreading the cost estimate based on 1 Oct 00 prices accordingly.
- o Complete "full-inflation cost estimates." For each PPA, inflate the cost estimate based on 1 Oct 00 prices, as spread by the execution schedule, by use of compound rates.

Table 1  
FY02 PROGRAM  
COST ESTIMATE UPDATING  
RATES

Examples: (Methods shown provide minimum acceptable accuracy. Refinements in these, theoretically providing greater accuracy, are permissible. Monthly rates of each class are provided to accommodate such refinement.)

1. Estimate "base year cost estimate" for a Class 1 item with a 1 Oct 99 cost of \$1M by evaluating:  
 $(\$1\text{M in 1 Oct 99 prices})(\text{FY01 rate}) = (\$1\text{M})(1.049) = \$1.049\text{M}.$
2. Estimate the remaining "full-inflation cost estimate" for a Class 1 item with scheduled multi-year cost, in base year prices, of \$100K, monthly, through 30 Jun 03 by evaluating:  
 $(\$1.2\text{M in 1 Oct 00 prices}) + (\$1.2\text{M in 1 Oct 00 prices})(\text{FY02 rate}) + (\$0.6\text{M in 1 Oct 00 prices})(\text{FY03 rate}) = (\$1.2\text{M}) + (\$1.2\text{M})(1.045) + (\$0.6\text{M})(1.086) = \$3.106\text{M}.$
3. Estimate the "full-inflation cost estimate" for a Class 2 item with scheduled multi-year costs, in base year prices, of \$10M, from 23 Apr 10 through 26 Sep 12 by evaluating:
  - contract period midpoint FY (FY in which midpoint of contract falls):  
contract period = 23 Apr 10 through 26 Sep 12 = 2 years, 5 months, 3 days = 2.43 years;  
period from start to midpoint of contract period = 2.43 years / 2 = 1.22 years;  
date of midpoint of contract period = 23 Apr 10 + 1.22 years = 12 Jul 11;  
midpoint FY = 11.
  - "full-inflation cost estimate" (reflecting inflation through midpoint FY):  
 $(\$10\text{M in 1 Oct 00 prices})(\text{FY11 rate}) = \$10\text{M}(1.370) = \$13.70\text{M}.$

Deleted



Table 1

Class 1  
Base  
Re

Table 1  
FY03 PROGRAM  
COST ESTIMATE UPDATING  
RATES

COST ITEM 1/	CY/FY																					
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
	SIMPLE 15/		COMPOUND 16/																			
Class 1	1.048	1.044	1.039	1.081	1.128	1.177	1.228	1.281	1.336	1.393	1.451	1.512	1.575	1.640	1.707	1.777	1.848	1.923	2.000	2.080	2.162	2.246
Oct	1.037	1.051	1.042	1.077	1.127	1.178	1.229	1.281	1.336	1.393	1.451	1.512	1.575	1.640	1.707	1.777	1.849	1.923	2.000	2.079	2.164	2.246
Nov	1.037	1.051	1.042	1.077	1.127	1.178	1.229	1.281	1.336	1.393	1.451	1.512	1.575	1.640	1.707	1.777	1.849	1.923	2.000	2.079	2.164	2.246
Dec	1.037	1.051	1.042	1.077	1.127	1.178	1.229	1.281	1.336	1.393	1.451	1.512	1.575	1.640	1.707	1.777	1.849	1.923	2.000	2.079	2.164	2.246
Jan	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Feb	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Mar	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Apr	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
May	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Jun	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Jul	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Aug	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Sep	1.051	1.042	1.037	1.083	1.129	1.177	1.228	1.281	1.336	1.392	1.451	1.512	1.575	1.640	1.707	1.776	1.848	1.923	1.999	2.080	2.161	2.246
Class 2	1.033	1.032	1.032	1.065	1.099	1.134	1.171	1.208	1.248	1.289	1.332	1.376	1.421	1.468	1.516	1.566	1.618	1.671	1.727	1.784	1.842	1.903
Oct	1.003	1.003	1.035	1.068	1.102	1.137	1.174	1.211	1.251	1.293	1.335	1.379	1.425	1.472	1.520	1.571	1.622	1.676	1.731	1.788	1.847	1.908
Nov	1.005	1.005	1.038	1.071	1.105	1.140	1.177	1.215	1.255	1.296	1.339	1.383	1.429	1.476	1.525	1.575	1.627	1.681	1.736	1.793	1.853	1.914
Dec	1.008	1.008	1.040	1.074	1.108	1.143	1.180	1.218	1.258	1.300	1.343	1.387	1.433	1.480	1.529	1.579	1.631	1.685	1.741	1.798	1.858	1.919
Jan	1.011	1.011	1.043	1.076	1.111	1.146	1.183	1.221	1.262	1.303	1.346	1.391	1.437	1.484	1.533	1.584	1.636	1.690	1.746	1.803	1.863	1.924
Feb	1.013	1.013	1.046	1.079	1.114	1.149	1.186	1.225	1.265	1.307	1.350	1.394	1.440	1.488	1.537	1.588	1.640	1.694	1.750	1.808	1.868	1.929
Mar	1.016	1.016	1.049	1.082	1.117	1.152	1.189	1.228	1.268	1.310	1.354	1.398	1.444	1.492	1.541	1.592	1.645	1.699	1.755	1.813	1.873	1.935
Apr	1.019	1.019	1.051	1.085	1.120	1.155	1.192	1.231	1.272	1.314	1.357	1.402	1.448	1.496	1.545	1.596	1.649	1.704	1.760	1.818	1.878	1.940
May	1.021	1.021	1.054	1.088	1.123	1.158	1.196	1.235	1.275	1.317	1.361	1.406	1.452	1.500	1.550	1.601	1.654	1.708	1.765	1.823	1.883	1.945
Jun	1.024	1.024	1.057	1.091	1.125	1.161	1.199	1.238	1.279	1.321	1.365	1.410	1.456	1.504	1.554	1.605	1.658	1.713	1.769	1.828	1.888	1.950
Jul	1.027	1.027	1.060	1.093	1.128	1.165	1.202	1.241	1.282	1.325	1.368	1.413	1.460	1.508	1.558	1.609	1.663	1.717	1.774	1.833	1.893	1.956
Aug	1.029	1.029	1.062	1.096	1.131	1.168	1.205	1.245	1.286	1.328	1.372	1.417	1.464	1.512	1.562	1.614	1.667	1.722	1.779	1.837	1.898	1.961
Sep	1.032	1.032	1.065	1.099	1.134	1.171	1.208	1.248	1.289	1.332	1.376	1.421	1.468	1.516	1.566	1.618	1.671	1.727	1.784	1.842	1.903	1.966

- 1/ Class 1 or Class 2. Class 1 includes "permanent" hired labor items (including pay and benefits). Class 2 includes all other items, including "temporary" hired labor and nonfederal labor.
- 2/ Class 1 "raise" rates are effective for calendar year; Class 2 "inflation" rates are effective for fiscal year. Assumptions are generalized for the Corps as a whole; if you have more pertinent data for your part of this whole, you may substitute that data for the generalized data shown here.
- 3/ Generally, fraction of total pay contributed by the government for benefits. Based on fractions of force participating in CSRS (Civil Service Retirement System) and FERS (Federal Employee Retirement System), and permanent force turnover rate.
- 4/ Not based on pay, however, expressed as fraction of "regular" pay.
- 5/ Based on "total" instead of "regular" pay; rates reflect adjustment for this.
- 6/ Only partially based on pay, however, expressed as fraction of "regular" pay.
- 7/ Manpower in fulltime equivalent employment years (FTEs).
- 8/ Fraction of permanent manpower lost, annually.
- 9/ Fraction of permanent manpower shifted (turned over) from CSRS to FERS coverage, annually.
- 10/ Number of FERS anniversary. (All federal permanent employees first hired after 1983 have been covered by FERS, created by Congress to bring federal workers under the Social Security System, beginning in 1984.)
- 11/ Applies to all permanent civilian workers, including SES, GM, GS, and Wage Board employees.
- 12/ Fraction of raise to be absorbed (not realized).
- 13/ Used in amounts of 1/4 for initial calendar year (CY) and 3/4 for final CY for any fiscal year (FY) of any period in calculating "Compound Rate" for final FY of the period. For example, in calculating the Class 1 compound rate for FY04, use rates for FY02 and FY03 as follows:
- $$(1 + (1/4)(CY01 \text{ rate}) + (3/4)(CY02 \text{ rate}))(1 + (1/4)(CY02 \text{ rate}) + (3/4)(CY03 \text{ rate})) = (1 + (1/4)(0.042) + (3/4)(0.037))(1 + (1/4)(0.037) + (3/4)(0.042)) = 1.081.$$
- 14/ Used for any FY of any period in calculating "Compound Rate" for final FY of the period. For example, in calculating the Class 2 compound rate for FY04, use rates for FY03 and 04 as follows:
- $$(1 + FY03 \text{ rate})(1 + FY04 \text{ rate}) = (1 + 0.032)(1 + 0.032) = 1.065.$$
- 15/ Use FY02 annual rates to update estimates based on 1 Oct 00 prices to get estimates based on 1 Oct 01 prices. Use monthly rates in accordance with Footnote 17. (See first two points of Algorithm, and Example 1.)
- 16/ Use annual rates to update estimates based on 1 Oct 01 prices to get estimates based on 1 Oct prices for year of interest. Use monthly rates in accordance with Footnote 17. (See last two points of Algorithm, and Example 2 and 3.) Determine the rate for years beyond FY22 by multiplying the FY22 rate by:  $(1 + (FY22 \text{ rate} - FY21 \text{ rate})/(FY21 \text{ rate}))^n$  power. For example, determine the Class 1 rate for FY26 by evaluating:
- $$(2.246)/((1 + (2.246 - 2.162)/(2.162))4^{\text{th power}}) = 2.617$$
- Determine the Class 2 rate by evaluating
- $$(1.903)/((1 + (1.903 - 1.842)/(1.842))4^{\text{th power}}) = 2.168$$
- 17/ Class 1 monthly rates are nonapplicable individually. They are included only to show month-wise parts of annual updating factors, reflecting annual start-of-calendar-year raises applicable for the full year. Do not use them to update estimates. On the other hand, Class 2 monthly rates are applicable individually. They reflect continually accruing inflation over the full year of interest. Use these to update estimates based on 1 Oct prices to get estimates based on end-of-month prices for any month of interest. For improved accuracy, interpolate proportionally between successive rates.

Table 1  
FY03 PROGRAM  
COST ESTIMATE UPDATING  
RATES

Algorithm:

- o Update "work/workload." For each program/project/activity (PPA), revise the work/workload, as necessary, to best reflect reality.
- o Complete "base year cost estimates." For each PPA, given revised work/workload, inflate the cost estimate based on 1 Oct 00 prices to get the cost estimate based on 1 Oct 01 prices, by use of simple rates.
- o Update "execution schedules." For each PPA, revise the execution schedule to best reflect reality, spreading the cost estimate based on 1 Oct 01 prices accordingly.
- o Complete "full-inflation cost estimates." For each PPA, inflate the cost estimate based on 1 Oct 01 prices, as spread by the execution schedule, by use of compound rates.

Examples: (Methods shown provide minimum acceptable accuracy. Refinements in these, theoretically providing greater accuracy, are permissible. Monthly rates of each class are provided to accommodate such refinement.)

1. Estimate "base year cost estimate" for a Class 1 item with a 1 Oct 99 cost of \$1M by evaluating:  
$$(\$1\text{M in 1 Oct 99 prices})(\text{FY01 rate}) = (\$1\text{M})(1.049) = \$1.049\text{M}.$$
2. Estimate the remaining "full-inflation cost estimate" for a Class 1 item with scheduled multi-year cost, in base year prices, of \$100K, monthly, through 30 Jun 04 by evaluating:  
$$(\$1.2\text{M in 1 Oct 01 prices}) + (\$1.2\text{M in 1 Oct 01 prices})(\text{FY03 rate}) + (\$0.6\text{M in 1 Oct 00 prices})(\text{FY04 rate}) = (\$1.2\text{M}) + (\$1.2\text{M})(1.039) + (\$0.6\text{M})(1.081) = \$3.095\text{M}.$$
3. Estimate the "full-inflation cost estimate" for a Class 2 item with scheduled multi-year costs, in base year prices, of \$10M, from 23 Apr 11 through 26 Sep 13 by evaluating:
  - contract period midpoint FY (FY in which midpoint of contract falls):  
contract period = 23 Apr 11 through 26 Sep 13 = 2 years, 5 months, 3 days = 2.43 years;  
period from start to midpoint of contract period = 2.43 years / 2 = 1.22 years;  
date of midpoint of contract period = 23 Apr 11 + 1.22 years = 12 Jul 12;  
midpoint FY = 12.
  - "full-inflation cost estimate" (reflecting inflation through midpoint FY):  
$$(\$10\text{M in 1 Oct 01 prices})(\text{FY12 rate}) = \$10\text{M}(1.332) = \$13.32\text{M}.$$

EC 11-2-181  
31 Mar 01

APPROPRIATION ACCOUNT: _____ *  DIVISION: _____	ILLUSTRATION 1 REQUEST FOR WAIVER PY THROUGH PY+4 PROGRAM (\$K)					
PROJECT NAME	PY	PY+1	PY+2	PY+3	PY+4	REASONS FOR WAIVER
(GENERAL INVESTIGATIONS - PED program)						
PROJECT B						
Baseline Level	250	180	100			Fund as PY new construction start. PY-1 PED Congressional add advanced schedule 1 year. Sponsor working on financing now. PY & PY+1 funding adjusted to award 1st contract in 4th qtr of PY+1.
Requested Amount	325	215	0			
Change	75	35	(100)	0	0	
(CONSTRUCTION, GENERAL - ongoing program)						
PROJECT A						
Baseline Level	2,000	0	0	0	0	Fund at capability level per request of project sponsor. Will advance completion by 8 months. No impact on outyear amounts.
Requested Amount	4,000	0	0	0	0	
Change	2,000	0	0	0	0	
(CONSTRUCTION, GENERAL - new start program)						
PROJECT C						
Baseline Level	N/A					Recommended PY-1 new construction start. Selection Criterion 4 (cost estimate) not met. Authorized (NED) plan is backed by sponsor; financing is firm, with State support. Construction cost estimate is expected to be within 16% of authorized estimate, after inflation adjustment. Benefits are urban. BCR is 1.3 (at 6 53/8%).
Requested Amount	858	2,200	2,900	3,500	5,100	
Requested Amount	858	2,200	2,900	3,500	5,100	
(TOTAL)*						
Baseline Level						
Requested Amount						

\* For each account; for the CG account, show the ongoing and new starts programs, separately.

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(TO BE TYPED AS NECESSARY)

ILLUSTRATION 2

DATE: \_\_\_\_\_

CERTIFICATION OF COMPLIANCE WITH SECTION 3(D) OF EXECUTIVE ORDER 12906  
and SECTION 7.g(4) of ER 1110-1-8156

I hereby certify that the PY program for the \_\_\_\_\_ (district, division, or laboratory name) Civil Works Program does not include an implicit or explicit request for funds to collect, produce, or acquire Geospatial data that is available through the National Geospatial Data Clearinghouse and that all possible data collection partnerships identified through the Clearinghouse were investigated. The \_\_\_\_\_ (district, division, or laboratory name) has also contributed metadata to the National Geospatial Data Clearinghouse in accordance with ER 1110-1-8156.

Colonel, Corps of Engineers  
Commanding

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EC 11-2-181  
31 Mar 01

ILLUSTRATION 3 A

DATE: \_\_\_\_\_

CERTIFICATION OF COMPLIANCE WITH COASTAL BARRIER RESOURCES ACT

I hereby certify that the PY program for the \_\_\_\_\_ (district name) District Civil Works Program does not include a request for funds which would result in any new federal expenditures or financial assistance prohibited by the Coastal Barrier Resources Act (PL 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591).

Colonel, Corps of Engineers  
Commanding

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(TO BE TYPED AS NECESSARY)

ILLUSTRATION 3 B

DATE: \_\_\_\_\_

CERTIFICATION OF COMPLIANCE WITH COASTAL BARRIER RESOURCES ACT

I hereby certify that no Civil Works Program funds were obligated in PY-2 by the  
\_\_\_\_\_ (district name) District for any new federal expenditures or financial  
assistance prohibited by the Coastal Barrier Resources Act (PL 97-348), as amended by the Coastal  
Barrier Improvement Act of 1990 (PL 101-591).

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Commanding

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ILLUSTRATION 4  
MANAGEMENT CONTROL EVALUATION CHECKLIST

**FUNCTION.** The function covered by this checklist is Civil Works Program Development.

**PURPOSE.** The purpose of this checklist is to assist programs management organizations in USACE major subordinate commands (MSC) and districts in evaluating key management controls in development of their annual program requests. It is not intended to cover all controls.

**INSTRUCTIONS.** Become thoroughly familiar with the contents of the Program EC and read paragraph 154 before completing the checklist.

**TEST QUESTIONS:**

1. Does the 10-year program provide for continuity in the workflow once the new start decisions are made?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

2. Are projections of work and funding requirements consistent with current approved project management schedules?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

3. Do study and PED schedules include all steps/milestones through the completion of construction?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

4. Are funding schedules continuously reviewed and adjusted to reflect Congressional actions, the local sponsors' financial capability, and project progress?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

5. Does development of the multi-year programs follow the guidance included in the applicable appendices of the Program EC?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

6. Are alternative multi-year program proposals fully documented?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**



ILLUSTRATION 4 (Continued)  
MANAGEMENT CONTROL EVALUATION CHECKLIST

7. Is the multi-year Capability program independent of the other programs, yet consistent with Army policy and approved project cooperation agreements?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

8. Have the "Class 1" rates of Table 1, "PY Program, Cost Estimate Updating," been applied to the pay-related costs for civilian employees?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

9. Have the "Class 2" rates of Table 1, "PY Program, Cost Estimate Updating," been used to update costs for consultants and AEs used in the various preconstruction planning and construction stages of work?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

10. Have the "Class 1" and "Class 2" rates of Table 1, "PY Program, Cost Estimate Updating," been used for the period PY-1 through PY+19 for all activities?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

11. Has the procedure in Footnote 8 of Table 1, "PY Program, Cost Estimate Updating," been used to determine rates for use in updating cost estimates beyond PY+19?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

12. Are the appropriate discount rates being used to compute the benefit-cost ratios of projects?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

13. Is the fiscal year of the approval date of the current economic analysis:

a. for new and continuing PED, not more than three years older than the fiscal year of the submission date of the program request to HQUSACE?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

ILLUSTRATION 4 (Continued)  
MANAGEMENT CONTROL EVALUATION CHECKLIST

b. for new construction starts, not more than three years older than the fiscal year of the assumed program decision date by the Administration and Congress?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

14. Were benefit-cost ratio computations based on benefits in the latest approved economic analyses and current project costs deflated to the price levels of such benefits?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

15. Are new start recommendations justified based on NED benefits, or responsive to restoration and protection of environmental resources, including fish and wildlife habitat, i. e., inland and coastal wetlands, other aquatic and riparian habitat, and upland habitat?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

16. Do recommended new construction starts have firm M-CACES baseline cost estimates?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

17. Have new start recommendations been screened according to the criteria established in the Program EC?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

18. Are the projects programmed for construction in PY through PY+9 based on the estimates and schedules established for them in programmed studies and PED projects, as applicable?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

19. Are data in the Construction, General, and General Investigations illustrations compatible, showing that:

a. construction is programmed in the fiscal year following PED completion?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

ILLUSTRATION 4 (Continued)  
MANAGEMENT CONTROL EVALUATION CHECKLIST

b. project cost estimates are identical?

**Response:** YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_\_\_\_

**Remarks:**

[NOTE: Help make this a better tool for evaluating management controls. Submit suggestions for improvement to HQUSACE (CECW-BD), Washington, D. C. 20314-1000.]

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31 Mar 01

ILLUSTRATION 5

DATE: \_\_\_\_\_

CERTIFICATION OF USE OF MANAGEMENT CONTROL EVALUATION CHECKLIST

I hereby certify that the PY \_\_\_\_\_ (major subordinate command name)  
Division Civil Works Program was developed making full use of the Management Control Evaluation  
Checklist.

Director of Programs Management

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(TO BE TYPED AS NECESSARY)

TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S 2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
MAIN PART							
MAIN	Illustration 1, Request for Waiver	CECW-B Area Manager			X	2	6/
	Environmental Data for PRISM and OMABS	NA	X			NA	30 Jun
	Balance-to-Complete Report (PRISM/PBS)	NA	X			NA	31 Dec
	Illustration 2, Certification of Compliance with Section 3(D) of Executive Order 12906	CECW-BD			X	1	15 Aug
	Illustration 3A, Certification of Compliance with Coastal Barrier Resources Act (Program Request)	CECW-BD			X	1	15 Aug
	Illustration 3B, Certification of Compliance with Coastal Barrier Resources Act (Past Fiscal Year)	CECW-BD			X	1	15 Oct
	Illustration 5, Certification of Use of Management Control Evaluation Checklist	CECW-BD			X	1	22 Jun
GENERAL INVESTIGATIONS							
A-2	Illustration A-2.1, Reconnaissance Phase Study, Justification Statement New Initial Revised Congressional Continuing Initial Revised Congressional	CECW-B Area Manager		4/ 4/ 5/  4/ 4/ 5/		1	8 Jun 6/ 6/  6/ 6/ 6/
	Illustration A-2.2, Cost-shared Feasibility Study, Justification Statement New Initial Revised Congressional Continuing Initial Revised Congressional	CECW-B Area Manager		4/ 4/ 5/  4/ 4/ 5/		1	8 Jun 6/ 6/  22 Jun 6/ 6/

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31 Mar 01

TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S  2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
GENERAL INVESTIGATIONS (Continued)							
	Illustration A-2.3, Full Federal Expense Feasibility Study, Justification Statement New Initial Revised Congressional Continuing Initial Revised Congressional	CECW-B Area Manager		4/ 4/ 5/  4/ 4/ 5/		1	8 Jun 6/ 6/  22 Jun 6/ 6/
	Illustration A-2.4, Preconstruction Engineering and Design, Justification Statement New Initial Revised Congressional Continuing Initial Revised Congressional	CECW-B Area Manager		4/ 4/ 5/  4/ 4/ 5/		1	8 Jun 6/ 6/  22 Jun 6/ 6/
	Illustration A-2.5, Data Summary Table (Baseline Level)	NA	X			NA	30 Jun
	Illustration A-2.6, Data Summary Table (Information Level)	NA	X			NA	30 Jun
	Extension of PED Funding	CECW-BW		4/		1	1 Jul
A-3	Illustration A-3.1, District Breakdown	CECW-BW		4/		1	8 Jul
	Illustration A-3.2, Special Investigations - Work Accomplished	CECW-BW		4/		1	8 Jul
	Illustration A-3.3, Planning Assistance to States - Priority Listing	CECW-BW		4/		1	8 Jul
	Illustration A-3.4, International Water Studies	CECW-BW		4/		1	8 Jul

TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S  2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
GENERAL INVESTIGATIONS (Continued)							
	Illustration A-3.5, Floodplain Management Services	CECW-BW		4/		1	8 Jul
CONSTRUCTION, GENERAL							
B-2	Baseline Level PB-2a	NA	X			NA	30 Jun
	Environmental Information for Environmental Program Database	NA	X			NA	30 Jun
	Illustration B-2.1, Project Data Summary	NA	X			NA	30 Jun
	Illustration B-2.2A, Federal (Corps) Funding Requirements Summary	NA	X			NA	30 Jun
	Illustration B-2.2B, Inland Waterways Trust Fund Requirements Summary	NA	X			NA	30 Jun
	Illustration B-2.2C, Other Federal Agency Funding Summary	NA	X			NA	30 Jun
	Illustration B-2.2D, Non-federal Cash Contributions and Other Costs Summary	NA	X			NA	30 Jun
	Illustration B-2.2E, Harbor <u>Maintenance Trust</u> Fund Requirements Summary	NA	X			NA	30 Jun
	Illustration B-2.3, Completions Summary – Construction	NA	X			NA	30 Jun
	Illustration B-2.4, PY Justification Statement New Initial Revised Congressional Continuing Initial Revised Congressional	CECW-B Area Manager		4/ 4/ 5/  4/ 4/ 5/		1	1 Jun 6/ 6/  6/ 6/ 6/

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TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S 2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
CONSTRUCTION, GENERAL (Continued)							
	Illustration B-2.6, PY Proposed New Major Rehabilitation and Other New Work Summary	CECW-B Area Manager		4/		1	1 Jun
	Illustration B-2.7, Construction Eligibility Checklist	CECW-B Area Manager		4/		1	1 Jun
	Feasibility Report, EDR, LRR or GRR	CECW-B Area Manager			X	3	6/
	Maps for Regular Construction, Reimbursement, Resumption, Major Rehabilitation, Dam Safety Assurance, Deficiency Correction, Reconstruction, Dredged Material Disposal Facilities, and Unstarted Projects, and Unstarted Separable Elements New Initial Revised Congressional Continuing Initial Revised Congressional	CECW-B Area Manager		5/		1	1 Jun 6/ 6/  6/ 6/ 6/
	Reconnaissance Report for New Deficiency Correction, Reconstruction, Dam Safety Assurance, and Dredged Material Disposal Facilities Projects	CECW-B Area Manager			X	3	1 Jun
	Evaluation Report for New Major Rehabilitation Projects	CECW-OM-B			X	3	15 Mar
	EDR or Reevaluation Report for Resumptions, Unstarted Projects, and Unstarted Separable Elements	CECW-B Area Manager			X	3	1 Jun



TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S 2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
CONSTRUCTION, GENERAL (Continued)							
	Approved M-CACES baseline cost estimate (summary sheets) for New Start Regular Construction, Reimbursement, Resumption, Major Rehabilitation, Deficiency Correction, Reconstruction, and Unstarted Projects, and Unstarted Separable Elements	CECW-B Area Manager		4/		1	1 Jun
B-3	Continuing Authorities Program	NA				1	6/
B-4	Illustration B-4	CECW-BE			X	1	15 Jun
OPERATION AND MAINTENANCE, GENERAL							
C-2	Work Package information into computer by district	NA	X			NA	15 May
	Final MSC Rankings into computer	NA	X			NA	8 Jun
	Environmental Information into computer	NA	X			NA	30 Jun
	Baseline Level PB-2a for O&M-Funded Major Rehabilitation Projects	CECW-B Area Manager				1	30 Jun
	Evaluation Report for Major Rehabilitation Projects	CECW-B Area Manager			X	3	15 Mar
	Illustration B-2.4, PY Justification Sheet for O&M-Funded Major Rehabilitation Projects	CECW-B Area Manager		5/		NA	1 Jun
	Illustration C-2.1, Supplemental Justification - Major Maintenance	CECW-B Area Manager		X		1	8 Jun
	Illustration C-2-2, Dredged Material Management Plans	CECW-B Area Manager		X		1	1 Jul

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TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S  2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
OPERATION AND MAINTENANCE, GENERAL (Continued)							
	Illustration C-2.5, Justification of Estimate (Congressional Submission)	CECW-B Area Manager		5/		1	6/
C-3	Illustration C-3.1, National Emergency Preparedness - Recommended Program	CECW-OE-P		X		1	15 Jun
	Illustration C-3.2, National Emergency Preparedness - Recommended Program Supporting Data	CECW-OE-P		X		1	15 Jun
C-4	Illustration C-4.1, Supplemental Information Sheet for Recreation Facilities at Completed Projects	CECW-ON	X	X		1	15 Jun
FLOOD CONTROL AND COASTAL EMERGENCIES							
D	Illustration D-1, Program Request, Flood Control & Coastal Emergencies	CECW-OE-M		X		1	1 Jul
	Illustration D-2, Supporting Data	CECW-OE-M		X		1	1 Jul
	Illustration D-3, Emergency Management Program Data Sheet	CECW-OE-M		X		1	1 Jul
GENERAL EXPENSES							
E-2	Illustration E-2.1, Appropriation Summary Justification	CERM-B		X		1	8 Jun
	Illustration E-2.2, Personnel Summary Justification	CERM-B		X		1	8 Jun
REGULATORY PROGRAM							
F	Regulatory Program	CECW-OR		X		1	15 Jun

TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY 20022003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S 2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
REVOLVING FUND PLANT REPLACEMENT AND IMPROVEMENT PROGRAM							
G	PRIP - Current Year Minor Items Request	CERM-B	X	X	X	2	30 Jun
	New Major Items	CERM-B	X	X	X	2	30 Apr1 Jun
	Update of Continuing Major Items	CERM-B	X	X	X	2	30 Jun1
	Three-year PRIP Initial Midyear (FFY only) Updates	CERM-B	X	X	X	2	15 Oct31 Jul 15 Apr 6/
	Current Year Obligation/Expenditure Schedule Plan Initial Midyear Updates	CERM-B		X	X	2	15 AprNov 6/ 15 NovApr
	Category Transfer Report	CERM-B		X	X	2	15 Jan 15 Apr 15 Jul 15 OctSep
AUTOMATION COSTS							
H-4	Information Technology Investment Portfolio System (ITIPS)	NA	X			NA	31 Jan
	Three-year PRIP (initial)	CERM-B		X		1	15 Oct
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)							
I	Illustration I-1.1, Formerly Utilized Sites Remedial Action Program, Justification Statement, Initial Revised Congressional	CECW-BA	4/ 4/ 5/			1	6/ 6/ 15 JunDec
I	FUSRAP Data Illustration I-1.3, Alternative Outyear Programs	NACECW-BA	X	X		NA	15 Jun

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TABLE 2 SUMMARY OF SUBMISSION REQUIREMENTS FY <del>2002</del> 2003 BUDGET (Continued)							
EC PART	SUBMISSION						
	ITEM	RECIPIENT 1/	INPUT MEANS			C O P I E S  2/	DUE DATE 3/
			ADP DATA BASE	E-MAIL/ FTP	HARD COPY		
FOOTNOTES:							
1/	All hardcopy submissions will be sent to the recipient shown, WASH, DC 20314-1000.						
2/	Including original.						
3/	If date shown falls on a weekend or holiday, the date of the next workday becomes the due date.						
<u>4/</u>	Microsoft files.						
5/	Adobe Acrobat files.						
6/	As will be specified if and when item is requested.						

TABLE 3  
CORPS OF ENGINEERS - CIVIL WORKS  
ENVIRONMENTAL PROGRAM DATABASE DEFINITIONS

**Definitions of Categories**

1. **Mitigation.** Measures authorized by Congress or approved by headquarters to compensate for ecological resources unavoidably affected by a Corps project or activity. Includes stand-alone projects; work undertaken concurrently with project construction; and operation, maintenance and management of completed mitigation measures.

2. **Restoration.** Measures undertaken to return a degraded ecosystem's functions and values, including its hydrology, plant and animal communities, and/or portions thereof, to a less degraded ecological condition. The goal of restoration is to return the environmental study area to as near a natural condition as is justified and technically feasible. Priority will be given to restoration where a Corps project contributed to the degradation of the ecosystem and to modifications of existing Corps projects when such modifications are the most cost-effective means of restoring the ecological resources. [Note: HTRW cleanup is now a separate category.]

3. **Protection.** Protection consists of measures undertaken to protect and preserve an ecosystem's functions and values against future degradation as part of the operation, maintenance and management of a Corps project (e. g., natural resources management, and environmental dredging studies). It may be appropriate to include protection measures as an integral part of an ecosystem restoration project. However, for programming purposes, such measures are to be reported under the "restoration" category, as part of the overall restoration project.

4. **Cleanup.** Measures undertaken to achieve compliance with Federal or State laws or regulations to clean up hazardous, toxic and radioactive wastes (HTRW) on lands associated with Corps projects in planning or under construction, or on lands managed by the Corps (e. g., site studies, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) remedial actions, Resource Conservation and Recovery Act (RCRA) corrective actions, and cleanups related to leaking underground storage tanks). Includes items reported under OMB Circular A-106.

5. **Compliance.** Measures undertaken to achieve or sustain compliance with Federal or State laws or regulations under Clean Water Act, Clean Air Act, and other pollution control laws. Includes items reported under OMB Circular A-106. [Note: Measures to comply with the National Environmental Policy Act and the Endangered Species Act should now be reported along with other planning and construction costs under Mitigation or Restoration, as appropriate.]

6. **Prevention.** Measures undertaken to implement Executive Order 12856, Federal Compliance With Right to Know Laws and Pollution Prevention Requirements.

**Definitions of Activities Within Categories**

1. **Wetlands.** Measures involving wetlands, as defined in the Corps of Engineers 1987 Manual for Identifying and Delineating Jurisdictional Wetlands. **[Mitigation, Restoration, and Protection Categories only.]**

a. **Restoration/Creation.** [formerly Conservation and Creation subactivities] Non-regulatory measures to restore or create wetlands. Includes programs for the purchase or donation of easements on wetlands. Includes construction and planning costs, as well as activities to evaluate the initial success and continued management of these projects.

b. **Watershed Planning.** Technical assistance to States, Indian Tribes, local governments, or regional entities with wetland management authorities for the purpose of assisting non-Federal entities programs to protect or manage wetlands. Includes Section 22 activities.

c. **Mapping.** Measures to systematically collect geographically referenced information about the distribution, abundance, or characteristics of wetlands. Includes expenditures to produce and distribute aerial photographs, maps, or digital products.

d. **Land Acquisition.** Costs to acquire land for the purposes of mitigation, restoration, and protection of existing wetlands.

2. **Other Ecological Resources.** Activities other than those related to wetlands. **[Mitigation, Restoration, Protection, Cleanup, Compliance and Prevention Categories]**

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SUBAPPENDIX A-1  
GENERAL INVESTIGATIONS  
(RCS CECW-B-12)

A-1.1. **Applicability.** This appendix provides Program guidance and procedures for all activities in the General Investigations (GI) appropriation title and comparable ones from the Flood Control, Mississippi River and Tributaries (MR&T) appropriation title, where appropriate. A listing of all GI activities follows. MR&T activities are listed only when applicable. The list identifies the location of guidance within this appendix for each Category/Class/Subclass and categorizes the responses that Divisions are required to make by this EC.

Activity	Category/ Class/ Subclass		Guidance Provided in Subappendix	Division Response (Yes or No)
	GI	MR&T		
Navigation Studies	901-110			
Navigation - Reconnaissance	-111	908-111	A-2	Yes
Navigation - Feasibility	-112	-112	A-2	Yes
Flood Damage Prevention Studies	-120			
Flood Damage Prevention - Reconnaissance	-121	-113	A-2	Yes
Flood Damage Prevention - Feasibility	-122	-114	A-2	Yes
Shoreline Protection Studies	-130			
Shoreline Protection - Reconnaissance	-131		A-2	Yes
Shoreline Protection - Feasibility	-132		A-2	Yes
Special Studies	-140			
Special - Reconnaissance	-141	-115	A-2	Yes
Special - Feasibility	-142	-116	A-2	Yes
Watershed/Ecosystem - Reconnaissance	-143		A-2	Yes
Watershed/Ecosystem - Feasibility	-144		A-2	Yes
Comprehensive Studies	-150			
Comprehensive - Reconnaissance	-151	-117	A-2	Yes
Comprehensive - Feasibility	-152	-118	A-2	Yes
Review of Authorized Projects	-160			
Review of Deferred - Reconnaissance	-161		A-2	Yes
Review of Deferred - Feasibility	-162		A-2	Yes
Review of Completed - Reconnaissance	-163		A-2	Yes
Review of Completed - Feasibility	-164		A-2	Yes
Review of Marginal O&M Projects	-166		NA	No
Review of Local Protection Projects	-167		NA	No
Drought Contingency Planning (See O&M)	-168		NA	No
Special Investigations	-171		A-3	Yes
FERC Licensing Activities	-172		A-3	Yes
Interagency Water Resources Development	-173		A-3	Yes
Inventory of Dams	-174		NA	No
National Estuary Program	-175		A-3	Yes
North American Waterfowl Management Program	-176		A-3	Yes
National Marine Fisheries Program	-177		A-3	Yes



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Activity	Category/ Class/ Subclass		Guidance Provided in Subappendix	Division Response (Yes or No)
	GI	MR&T		
Interagency and International Support	901-178		A-3	Yes
Coordination with Other Water Resources Agencies	-181		A-3	Yes
Water Quality Management	-184		NA	No
Coastal Zone Management	-185		NA	No
Planning Assistance to States	-186		A-3	Yes
National Wild & Scenic Rivers System	-187		NA	No
Technical and Engineering Assistance on Shore and Streambank Erosion (Sec 55)	-188	908-119	NA	No
Legislative Phase I Studies (FDP)	-194	-132	A-2	Yes
Collection and Study of Basic Data	NA	-120	NA	No
Stream Gaging	-210		NA	No
Precipitation Studies	-220		NA	No
International Waters Studies	-240		A-3	Yes
Flood Plain Management Services	-250		A-3	Yes
Hydrologic Studies	-260		A-3	Yes
Scientific and Technical Information Centers	-270		NA	No
Coastal Field Data Collection	-280		NA	No
Transportation Systems	-291		NA	No
Environmental Data Studies	-292		NA	No
Flood Damage Data	-295		NA	No
Automated Information Systems Support	-294		NA	No
Research and Development	-300		NA	No
	-500		NA	No
Preconstruction Engineering and Design				
Projects not yet Authorized for Construction	-400	-140	A-2	Yes
Watershed/Ecosystem Projects	-410			
Navigation Channels and Harbors	-421	-141		
Navigation Locks and Dams	-422			
Beach Erosion Control	-440			
Flood Control, Local Protection	-451	-142		
Flood Control Reservoirs	-452			
Multiple Purpose Power	-460			
Projects Authorized for Construction	-600	-160	A-2	Yes
Watershed/ecosystem Projects	-610			
Navigation Channels and Harbors	-621	-161		
Navigation Locks and Dams	-622			
Beach Erosion Control	-640			
Flood Control, Local Protection	-651	-162		
Flood Control Reservoirs	-652			
Multiple Purpose Power	-660			

A-1.2. **Organization and Structure.** Subappendix A-2 includes all specifically Programmed activities - Surveys, Restudies/Reviews, Legislative Phase Is, and Preconstruction Planning and Design (PED). It provides guidance on feasibility studies and PEDs, including new starts. Subappendix A-3 covers all other activities funded by the General Investigations appropriation title and the Flood Control, Mississippi River and Tributaries counterparts.



SUBAPPENDIX A-2  
SPECIFICALLY PROGRAMMED STUDIES AND PROJECTS - NEW AND CONTINUING

**A-2.1. Ten-Year Programs.**

a. **Overview and Objectives.** The major objective of the General Investigations program is to study and design projects that provide solutions to water resources problems. Each division's ten-year program should be developed and conducted in such a manner that an orderly flow of urgently needed, properly designed, locally supported projects that are in accord with current policies and priorities are available for inclusion in the Corps construction program. The reconnaissance phase must be programmed not to exceed 12 months, unless written approval has been received from HQUSACE (CECW-P) to extend beyond 12 months, and the feasibility study period should be 36 months or less. Preconstruction engineering and design (PED) for most projects should be scheduled for accomplishment within two years of completion of the feasibility report with engineering appendix. In such a manner a project can be made available for construction about six years after initiating the reconnaissance phase.

b. **Program Expenditure Ceilings.** Illustration A-2.6 provides a listing of the Division Program Expenditure Ceilings for, studies and projects, excluding CECW Programmed Items, for PY through PY+9. The ceilings have been developed based on a review of actual expenditures for each Division from PY-5 through PY-3, PY-2 carryout and as well as current and projected requirements and as such represent the recent trend in capability that Division has exhibited in executing GI studies and projects in conjunction with the GI ceilings provided the Corps by the Office of Management and Program (OMB).

c. **Baseline Level.** (PRISM LVL C) Each Division will submit a ten-year program of continuing studies. Only studies and projects that adhere to existing legislation and current policy may be included within the ten-year program. The ten-year program will include specifically authorized continuing studies and projects.

~~d. **Decrement Below Baseline Level.** A decrement below baseline level is not required; however, each study and project must be prioritized as discussed in paragraph A-2.2 in order that division priorities may be respected, in so far as possible, in developing any nationwide decrement program that may ultimately be required.~~

d. Recommended program. (PRISM LVL C). This is an additional level that will include the new additional studies and projects that also adhere to existing legislation and current policy. Schedules of studies and projects included in the baseline may be advanced when that opportunity is available. A recommended program that exceeds the expenditure ceilings in excess of 25% of that reflected by Illustration A-2.6 must be accompanied by a waiver addressing the MSCs ability to execute the recommended program level.

~~e. **Capability Level.** (PRISM LVL C). Amounts reflected by this line will be utilized for expressing the PY program capabilities. This is an additional level that will include the new additional studies and projects that also adhere to existing legislation and current policy. Schedules of studies and projects included in the baseline level may be advanced when that opportunity is available. A capability program that exceeds the expenditure ceilings in excess of 25% of that reflected by Illustration A-2.6 must be accompanied by a waiver addressing the MSCs ability to execute the capability program level. The capability line will be utilized for developing the recommended program.~~

f. **Completion of Studies and Projects to be Terminated under current Policy.** Programming for ongoing studies and projects which do not meet the current policy criteria should be in compliance with the post PY-1 Appropriations agreed upon fact sheets.

**A-2.2. Prioritization.**

a. **Ranking.** Each specifically Programmed activity will be assigned a relative priority. This ranking should be developed after evaluation of the considerations outlined in the following paragraph.

b. **CECW Program.** CECW will review the GI portion of the Civil Works Program considering the national criteria in effect mid-summer PY-2 and guidance from ASA(CW) and OMB. It may or may not be possible to include all specifically Programmed studies that each Division recommends or that the Division included in the baseline level program. CECW may increase or decrease the total for GI. In such a case additional studies/projects may be accepted from your recommended capability program. CECW will consider some or all of the following in developing the final Program:

- accord with current policy
- urgency of implementation of problem solution
- chance of economic viability of recommended plan
- local support for continuation of activity
- chance of non-Federal participation in implementation of solution
- scheduled activity completion date
- impact on fish and wildlife and/or wetland resources

**A-2.3. Program Description and Procedure.**

a. **Feasibility Studies.**

(1) **Description.**

(a) **Regular Studies.** This encompasses all studies in Codes 901-110 through 153 and 908-111 through 118 and includes continuing studies, Federally funded and cost-shared, and new starts for reconnaissance phase studies. Cost sharing is not applicable to single purpose inland navigation studies on the nations inland waterways system in accordance with ER 1105-2-100, para 2-12.b.(4).

(b) ~~Restudy of "Deferred" Projects/~~**Review of Completed Projects.** A reconnaissance and then a feasibility phase at 50-50 cost sharing will be required for all studies unless the sole purpose of study is to dispose of a Federal project or reduce Federal expenses (i.e., disposal or turn over to local interests lock and dam projects with little or no commercial traffic). In this case the funding will be 100% Federal. For studies utilizing the "Review of Completed Projects" (Section 216), authority there must be an initial appraisal or reconnaissance report prepared using O&M funds under Inspection of Completed Works or individual projects prior to recommending a new start (reconnaissance or feasibility depending on the depth of study under O&M) under the General Investigations Program. The initial appraisal or reconnaissance report prepared under the O&M program should be limited to an expenditure of \$20,000. If more than \$20,000 is required, approval should be requested from CECW-OM, including sufficient information to justify the additional expenditure. Review of an operating Corps project may provide an effective mechanism for evaluating problems and opportunities in a watershed context. In such cases, the initial appraisal would be the vehicle for determining whether the project meets current day needs as well as identifying key stakeholders for participation in the subsequent feasibility process. The studies/projects programmed in accordance with this paragraph should utilize the appropriate Category/Class/Subclass (CCS) of paragraph A-1.1 that correlates with the Business Program when initiating a new phase and discontinue the use of the 160 CCSs.

(c) **Restudy of "Deferred" Projects.** The Restudy of Deferred Projects is the term used to examine a project that has been authorized but unconstructed for a number of years and local interests now wish to pursue implementation of a project. These are also known as PED resumptions. A reconnaissance level study would be the first PED activity done to determine if the authorized project remains justified and meets current day needs. If so, the next step would be a ~~PED resumption~~. If not, and if the reconnaissance level study determines that there is a justified alternative, a cost shared feasibility study would be conducted. PEDs programmed without a preceding feasibility study and PED resumptions must be reflected in the PRISM database as an 'E' correlating with the subparagraph of section A-2.3.b(1). The studies/projects programmed in accordance with this paragraph should utilize the appropriate Category/Class/Subclass (CCS) of paragraph A-1.1 that correlates with the Business Program when initiating a new phase and discontinue the use of the 160 CCSs.

**(2) Eligibility and Selection for Funding.**

(a) **New.** Eligible new starts include all active authorized feasibility studies which have not received an initial work allowance. The needs to be addressed should be of broad national scope and significance and should include at least one of the following: commercial navigation; inland navigation; flood damage reduction; hurricane and storm damage reduction; reallocation of existing storage or addition of storage to an existing project that would increase vendible outputs where there is no construction cost to the Federal government; and restoration of degraded ecosystem functions and values, including its hydrology, plant and animal communities, and/or portions thereof, to a less degraded ecological condition. (Within the restoration category of studies, priority will be accorded to cases where Corps projects contributed to the degradation of the ecosystem or where modification of existing Corps projects is the most cost effective means of restoring the ecological resources). Final selection for inclusion in the program will require justification on the specifics and history of the need or problem. The justification should be able to demonstrate the urgency for funding of the reconnaissance phase in the PY. In addition, based on recent expression of community interest, the Division Commander should believe there is a potential sponsor for the feasibility phase, one who understands the two-phase process and who would be willing to participate. Funds to initiate a new reconnaissance study will be issued with initial FY work allowances; however, the 12-month reconnaissance phase will be measured from the date of initial obligation of funds. Proposals for new Reviews of Completed projects must be accompanied by the completed initial appraisal or reconnaissance report prepared with O&M funds.

(b) **Continuing.** All active authorized continuously funded studies or previously funded cost shared studies that local interests fully support and that are judged likely to lead to implementation of a solution are eligible for funding in the PY. In addition, the study must address at least one of the needs of commercial navigation, flood damage reduction, hurricane and storm damage reduction, or restoration of fish and wildlife resources.

(c) **Resumption.** A General Investigations resumption is a study which was stopped but can now be resumed. Specifically a study that (1) was not included in the PY-1 Program or was not funded in the conference report which accompanied the PY-1 appropriation act and (2) was not funded in the conference report which accompanied the PY-2 appropriation act is a resumption. Where resumption of a feasibility study, that has heretofore been fully Federally funded, is proposed, the PY request will be for an update of the reconnaissance phase consistent with current policies at full Federal expense. Further work on the feasibility phase will be cost shared 50-50. Resumptions will be considered New Starts for eligibility and selection for funding purposes.

b. **Preconstruction Engineering and Design (PED).** PED will now be undertaken as a program concurrently financed ~~an up-front cost shared program~~ with non-Federal ~~local~~ sponsors. Sponsors must assure that they understand and are ready to sign a design-PED cost sharing ~~agreement~~ and have funds

available to finance the PED portion of the design of a project. PED will ultimately be cost shared at the rate for the project to be constructed but will be initially financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction. There are five programs of PED.

(1) **Description.**

(a) **PED Under the Concepts of Two-phase and Cost-shared Planning.** A PED that results from cost shared studies conducted under the two phase procedures will be programmed and justified as a continuing activity. Normally initial funding will be programmed in the fiscal year the feasibility report with engineering appendix is completed. Normally funds will be allotted immediately after the Division Engineer's Notice. These projects will not have to compete for new start status and will be included in the Program request as continuing activities as long as the anticipated project to be recommended is in accord with current priorities and a non-Federal sponsor is ready to contribute 25% of the PED cost during PED by stating their readiness to sign a design PED cost-sharing agreement. The PED estimate will include the cost of all engineering efforts (including inflation through the PED period) that are necessary to ready the project for construction, including in most cases the plans and specifications for the first significant contract. The project data summary, Illustration A-2.5, includes a data element to distinguish PEDs in this group from the other PED types.

(b) **Traditional PED.** This ~~is includes~~ PED on projects that have resulted from feasibility studies that were not accomplished under the two phase, cost-shared planning process. Normally, initial funding will be programmed in the fiscal year the feasibility report is completed. Funds will be allotted immediately after the Division Engineer's Notice if the funds have been Programmed and appropriated. These projects will have to compete for new start status and will not be included in a Program request as a new start unless specifically approved by the ASA(CW) and concurred in by the OMB and a non-Federal sponsor is ready to contribute 25% of the PED cost during PED by stating their readiness to sign a design PED cost-sharing agreement. The PED estimate will include the cost of all engineering efforts (including inflation through the PED period) that are necessary to ready the project for construction, including in most cases the plans and specifications for the first significant contract.

(c) **PED for Projects Authorized for Planning and Engineering Only.** PED for projects authorized for planning and engineering by the Water Resources Development Act of 1986 are included in this group. These projects will be Programmed for initiation of PED only after new start selection by ASA(CW) and concurrence by OMB. By definition, the planning and engineering phase will include all work required to submit a feasibility report with engineering appendix, and will be cost shared 50/50 with a non-Federal sponsor local interests. In accordance with Section 301 of Water Resources Development Act of 1990, if the sponsor provides 50 percent of the cost of the feasibility study the design phase will be treated as cost of construction. The design phase will include all work after the feasibility phase, including the Design Documentation Report (DDR) and plans and specifications for the first significant contract, and will be cost shared according to project purpose. A non-Federal sponsor must be ready to contribute 25% of the PED cost during PED by stating their readiness to sign a design PED cost-sharing agreement. Normally, there will be no reconnaissance phase for these projects unless specifically approved for inclusion in the program by CECW-P. The PED estimate will include the cost of all engineering efforts (including inflation through the PED period) that are necessary to ready the project for construction.

(d) **PED for Inland Navigation Projects.** PED for inland navigation projects will be programmed in accordance with the instructions in paragraph b(1)(a) above, except that a non-Federal sponsor for financing 25% of the PED phase is not necessary.

(e) **Other PED.** PED for projects which are not adequately described by the preceding subparagraphs of section A-2.3.b.(1). Normally, initial funding will be programmed in the fiscal year the supporting report is completed. These projects will have to compete for new start status and will not be included in a program request as a new start unless specifically approved by the ASA(CW) and concurred in by the OMB and a non-Federal sponsor is ready to contribute 25% of the PED cost during PED by stating their readiness to sign a ~~design PED cost-sharing~~ agreement. The PED estimate will include the cost of all engineering efforts (including inflation through the PED period) that are necessary to ready the project for construction, including in most cases the plans and specifications for the first significant contract.

(2) **Eligibility and Selection Criteria.**

(a) **New.** Potential new starts described under A-2.3.b. (1) (b)(c) and (e) above include all active projects/ studies which have not received an initial work allowance for PED (Codes 901-4xx or 6xx and 908-14x or 16x) or projects that were reclassified to "inactive" or "deferred" categories and (see paragraph A-2.3 a. (1)(b) and (e)) subsequently reclassified to "active" which meet the following:

1. For fully Federally funded feasibility reports other than inland waterway projects a Division Engineer notice recommending the project will be issued by June of the PY; or
2. The project was authorized for planning and engineering only by the Water Resources Development Act of 1986; and
3. The project has net economic benefits at the current interest rate; and
4. The primary project outputs are commercial navigation, inland navigation; flood damage reduction; hurricane and storm damage reduction; or restoration of degraded ecosystem functions and values, including its hydrology, plant and animal communities, and/or portions thereof, to a less degraded ecological condition. (Within the restoration category of studies, priority will be accorded to cases where Corps projects contributed to the degradation of the ecosystem or where modification of existing Corps projects is the most cost effective means of restoring the ecological resources.); and
5. There is no major unresolvable controversy or issue; and
6. There is an identified and willing sponsor who understands and has the ability to finance PED at the 25% rate and has the ability to finance the items of local cooperation for construction.

Note that projects previously funded but with no conference allowance in the prior three fiscal years will be treated as new starts. Also, projects will be prioritized by impact on fish and wildlife and/or wetland resources (see Table B-2.1).

(b) **Continuing.** Any active project for which PED funds were previously and continuously (see paragraph A-2.3b.(2)(a)) appropriated or any project that has resulted from cost-shared studies conducted under the two phase procedure may be included if the following are met:

- there is a strong probability of implementing a solution; and
- the activity meets criteria 3, 4, 5, and 6 under subparagraph (a) above.



#### A-2.4. Program Considerations.

a. Program amounts should be based on the PY-1 program, when applicable. Assumed PY-1 work allowances must be based on a proportional assignment of 156% savings and slippage applied against the amount included for each study and project in the conference report which accompanies the PY-1 appropriations act, or the PY-1 program in the absence of Congressional action on the PY-1 appropriations. Studies and projects may show a reprogramming of funds to offset the assigned savings and slippage amount, if necessary. In general, funds should be reprogrammed from negative reconnaissance and feasibility studies to meet the full requirements of other ongoing studies and projects. However, unless specific exception has been made by CECW-B, such reprogrammings must be offsetting within each Division. Final savings and slippage reductions will be based on Congressional action on the PY-1 appropriations.

b. Cost estimates and the schedules presented to Congress should be considered an upper limit and where possible the studies should be concluded sooner and at less cost. Any proposed cost estimate increase which results from an increase in study scope will require a commitment to study cost sharing of the additional study effort by the ~~non-Federal~~ local sponsor. If a waiver of this requirement is considered appropriate a specific proposal must be made and justification provided.

c. As stated in paragraph A-2.1.a. PED should be programmed for an accomplishment goal of two years of funding after completion of the feasibility report.

d. Study and PED cost estimates are to include an allowance for inflation in accordance with the instructions of paragraph 6 of this EC. The construction project cost estimate displayed in the PED portion of Illustration A-2.5 and the justification sheet will be based on 1 October of the PY-1 price level (DO NOT include an allowance for inflation through the construction period).

e. Annual funding requests for new reconnaissance phase studies are to be only for the amount required to carry out the anticipated activities during that FY.

f. Submissions for funding of continuing studies and projects not included in the PY-1 program request must be accompanied by a supplemental (page 2, see paragraph A-2.5.a.) justification describing the changed conditions that now warrant inclusion of the study/project in the PY request.

#### A-2.5. Submission Requirements.

a. **Justification Statements.** Supporting data for each study or project in the Division's programs, baseline and ~~capability~~ recommended level, that has a funding requirement in the PY, both new and continuing, will consist of a Justification Sheet, two part where necessary. The mandatory first page is the Congressional Justification. See Illustrations A-2.1 through A-2.4 for format and content for new start reconnaissance phase, feasibility phase (cost shared), continuing surveys (full Federal expense), and PED. The second page, which is required when funds are being requested to continue a study or project which was not included in the PY-1 program or appropriations, is to be used to provide any additional information or expansion of data more appropriately classified as supporting data not appropriate for inclusion in the congressional justification, but may be necessary for proper and complete consideration for inclusion in the President's Program. The appropriation title and division must be typed as the first line in the body of the first page of the survey and PED justification package. Do not underline any headings. The District must be identified under the survey or PED name. Justifications for new starts and continuing studies and projects are to be submitted electronically to HQUSACE, CECW-BC, E or W, WASH, D. C. 20314-1000.

b. **PED Completion.** Division Commander approvals of PED funding are to be submitted to HQUSACE, CECW-BC, E or W, WASH, D.C. 20314-1000, as appropriate. The views of the local sponsor on the schedule also are to be included.

c. **ADP.** The standard study/project data summary table is shown in Illustration A-2.5, Baseline Level. This Illustration combines reconnaissance, feasibility studies and PED projects on the same sheet. All studies and projects, including new starts, will be coded into the system. Instructions have been furnished by separate correspondence. A feasibility study will use the same PWI number as the reconnaissance study when there is only one feasibility study as a result of the reconnaissance. In the situation where more than one feasibility results from a reconnaissance, a new PWI number and study name will have to be obtained from HQUSACE, CECW-BA for each additional feasibility study. In addition, a PED project will use the same PWI number as the feasibility study when there is only one project coming out of the parent study. In the situation where PED effort on one of a number of interims is to be displayed, a new PWI number, to be obtained from HQUSACE, CECW-BA, will have to be assigned and the project name modified appropriately. Any study or PED programmed for initiation in PY+1 or later should have a status code of "Z".

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ILLUSTRATION A-2.1  
NEW START RECONNAISSANCE PHASE STUDY

APPROPRIATION TITLE: General Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-1) \$	Allocation FY (PY-1) \$	Tentative Allocation FY (PY) \$	Additional to Complete After FY (PY) \$
SURVEYS - NEW ( Insert Type)					
Study Name	100,000	0	0	100,000	0
EFG District					

Furnish a brief description of the study area, water resource development problems, and principle purposes of the study. For example, for flood damage prevention studies any information available on recent flood history. (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. For environmental studies, include information in terms of criteria such as degraded habitat units, acres of wetlands, uniqueness of the resource. Also provide any pertinent information concerning coordination with Federal and state resource agencies under the Fish and Wildlife Coordination Act (FWCA). Identify relationship to other project purposes if appropriate. Do not include irrelevant data such as "mild summers or harsh winters"; do include all the data that would tell why this study should be selected out of the many recommended. Also cite any matters known to be of concern to the Congress and identify the tentative local sponsor who has indicated intent to share equally in the feasibility phase cost that may follow the reconnaissance study. (A separate sponsor for an environmental study purpose may be appropriate.) Describe briefly the general scope and key areas of concern that are to be addressed in the reconnaissance study, probable solutions if this type of information is available, and the work to be performed in the program year. This paragraph should present specific arguments and evidence that it is important to initiate the study in the program year and similar evidence that makes it clear that the study and its anticipated outputs are in accord with Administration policy. The reconnaissance phase is scheduled to be completed in (Month 19XX), which is (12 or less) months after initiating the study.

Cite study authority. (In the event that sufficient study authority is not available to accomplish study purpose it should be so noted and a request for appropriate authority must be in progress.)

ILLUSTRATION A-2.2  
COST-SHARED FEASIBILITY STUDY

APPROPRIATION TITLE: General Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-1) \$	Allocation FY (PY-1) \$	Tentative Allocation FY (PY) \$	Additional to Complete After FY (PY) \$
ABCD River & Tributaries, Nothing Wash EFG District	400,000	0	100,000	150,000	150,000

Furnish a brief description of the study area, water resource development problems, and principle purposes of the study. For example, for flood damage prevention studies any information available on recent flood history. (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. Do not include irrelevant data such as "mild summers or harsh winters"; do include all the data that would tell why this study should be selected out of the many recommended. Also cite any matters known to be of concern to the Congress. Describe briefly the general scope and key areas of concern that were or are being addressed in the reconnaissance study, probable solutions, and the work to be performed in the Program year. This paragraph should present specific arguments and evidence that it is important to fund the study in the Program year and similar evidence that makes it clear that the study and its anticipated outputs are in accord with Administration policy. Provide best available sponsor information. (Name of potential or actual sponsor, dates of verbal or written commitments, scheduled or actual FCSA signing.)

Fiscal Year (PY-1) funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year (PY) will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$600,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. ~~Up to one half of the non-Federal share may be in-kind services.~~ A summary of study cost sharing is as follows:

Total Estimated Study Cost	\$700,000
Reconnaissance Phase (Federal)	100,000
Feasibility Phase (Federal)	300,000
Feasibility Phase (Non-Federal)	300,000

The reconnaissance phase is scheduled for completion in September (Month and Year)(Date of signing of FCSA). The feasibility study is scheduled for completion in September (Month and Year)(Date of Division Commander's public notice).

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ILLUSTRATION A-2.3  
FULL FEDERAL EXPENSE FEASIBILITY STUDY

APPROPRIATION TITLE: General Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-1) \$	Allocation FY (PY-1) \$	Tentative Allocation FY (PY) \$	Additional to Complete After FY (PY) \$
XYZ River Basin EFG District	750,000	200,000	225,000	150,000	175,000

This paragraph should describe the study area, the ~~water resources~~ navigation problems and potential solutions. Results of the study to date should be covered as well as information that conveys to the reviewer ( Corps, Army, OMB, Congress) that the study and its anticipated outputs are in accord with Administration priorities.

This paragraph is to be used to describe the activities to be undertaken during the PY-1. The activities pertaining to each interim are to be clearly described.

This third paragraph is to be used to describe the activities to be undertaken in the PY.

This final paragraph will set forth the schedule for the study including completion dates ( month and year ) (date of Division Commander's public notice) for each interim and the overall study.

ILLUSTRATION A-2.4  
PRECONSTRUCTION ENGINEERING AND DESIGN

APPROPRIATION TITLE: General Investigations, Fiscal Year (PY)

Division: \_\_\_\_\_

Study	Total Estimated Federal Cost \$	Allocation Prior to FY (PY-1) \$	Allocation FY (PY-1) \$	Tentative Allocation FY (PY) \$	Additional to Complete After FY (PY) \$
PRECONSTRUCTION ENGINEERING AND DESIGN ACTIVITIES (PED) <del>ACTIVITIES</del> (Type)					
XYZ Project	1,100,000	500,000	450,000	150,000	0
EFG District					

XWV River drains an area of about 2,114 square miles in southwest State and empties into Something Harbor. The XYZ flood plain encompasses about 1,560 acres of mostly urban development on the left bank of the XWV River. The maximum flood of record, that of December 1933, would have caused an estimated \$13.4 million damages to XYZ River under October (PY-1) prices and conditions of development. A feasibility report was completed in FY 1996. The recommended project, estimated to cost \$xx.x million with an estimated Federal cost of \$xx.xx million and an estimated non-Federal cost of \$xx.xx million, includes construction of a levee system to provide flood protection to 1,318 acres in XYZ. Pumping stations and gravity outlets with tide gates would be included to accommodate interior drainage. The average annual benefits amount to \$2.7 million, all for flood control. The benefit-cost ratio is 1.2 to 1 based upon the latest economic analysis dated (Month Year). Identify project sponsor and set forth latest evidence of support. (Sponsor's must assure that they understand and are ready to sign a design PED cost-sharing agreement and have funds available to finance the PED portion of the design of a project.) PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

Total Estimated Preconstruction Engineering and Design Costs	\$1,333,000	Total Estimated Preconstruction Engineering and Design Costs	\$1,333,000
Initial Federal Share	1,000,000	Ultimate Federal Share	xxx,000
Initial Non-Federal Share	333,000	Ultimate Non-Federal Share	xxx,000

The project is authorized for construction by (Cite the construction authorization and cost sharing requirements). Fiscal Year (PY-1) funds are being utilized to continue work on the Feature Design Memorandum, including economic studies. Fiscal Year (PY) funds will be used for completion of PED in (Month and Year).

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MM/DD/YY HH:MM VERSION: XYZ  
####  
DIVISION/DISTRICT: \*\* (DIS)  
BFY:\_\_\_ LVL: B  
=====

ILLUSTRATION A-2.5  
STUDY DATA SUMMARY TABLE (\$ IN THOUSAND)

LAST REVISION: MM/DD/YY BY: PAGE:

SELECT: \_\_\_\_\_ PWI: \_\_\_\_\_  
SINCE: \_\_\_\_\_ SORT: \_\_\_\_\_

S U R V E Y				P E D			
NAME: XYZ RIVER, ST APPN: ___ CCS: ___ PWI: _____ SS1:^^ SS2:^^ LPRJ: _____				NAME: XYZ RIVER, ST APPN: ___ CCS: ___ PWI: _____ SS1:^^ SS2:^^ LPRJ: _____			
STATUS: ___ % NONSTRUCTURAL FDR: ___ MAJOR BENEFITS: ___ BENEFITS: ___ STATE: ___ CODE: ___				STATUS: ___ % NONSTRUCTURAL FDR: ___ MAJOR TOTAL B/C RATIO: ___ PROGRAM			
D A T E S				D A T E S			
FY FUNDS FIRST ALLOCATED: _____ SCHEDULED COMPLETION DATES: _____ LAST DD-MMM-YYYY CURRENT DD-MMM-YYYY RECOMMENDED CAPABILITY DD-MMM-YYYY		RECON YYYY FEASIBILITY N/A DD-MMM-YYYY DD-MMM-YYYY DD-MMM-YYYY		SCHEDULED FINANCING AGREEMENT: _____ FY FUNDS FIRT ALLOCATED: _____ SCHEDULED COMPLETION DATES: _____ LAST DD-MMM-YYYY CURRENT DD-MMM-YYYY RECOMMENDED CAPABILITY DD-MMM-YYYY FY AVAILABLE FOR CONSTRUCTION: _____		XXXX	
COST ESTIMATES				COST ESTIMATES			
FEDERAL: \$\$\$ NON-FEDERAL: N/A TOTAL: \$\$\$ GRAND TOTAL (RECONNAISSANCE + FEASIBILITY): \$\$\$\$		FEASIBILITY \$\$\$ \$\$\$ \$\$\$		FEDERAL: \$\$\$ NON-FEDERAL: N/A TOTAL: \$\$\$		PROJECT \$\$\$ N/A \$\$\$ PE D \$\$\$ \$\$\$ \$\$\$	
CURRENT YEAR - (PY-1) FUNDING				CURRENT YEAR - (PY-1) FUNDING			
BUDGET AMOUNT: \$\$\$ CONFERENCE AMOUNT: \$\$\$ ASSUMED SAVINGS AND SLIPPAGE: \$\$\$ OTHER ADJUSTMENTS \$\$\$ RESC GRH AMOUNT \$\$\$				BUDGET AMOUNT: \$\$\$ CONFERENCE AMOUNT: \$\$\$ ASSUMED SAVINGS AND SLIPPAGE: \$\$\$ OTHER ADJUSTMENTS \$\$\$ RESC GRH AMOUNT \$\$\$			

ILLUSTRATION A-2.5 (Continued)  
STUDY DATA SUMMARY TABLE (\$ IN THOUSANDS)

FUNDING-----		ALLOCATIONS-----		BUDGET REQUEST-----		PROGRAMMED-----							BALANCE AFTER	
LEVEL	THRU PY-2	PY-1	PY	PY+1	PY+2	PY+3	PY+4	PY+5	PY+6	PY+7	PY+8	PY+9	PY+9	PY+9
*** SURVEY ***														
FEDERAL (CORPS):														
BASELINE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RECOMMENDED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
NON-FEDERAL:														
CASH	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
OTHER	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
*** PED ***														
FEDERAL(CORPS):														
BASELINE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RECOMMENDED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CASH	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
=====														
- SURVEY FUNDING IS NOT IN BALANCE: BASELINE NONFEDERAL DECREMENT CAPABILITY														
- SURVEY FUNDING IS NOT IN BALANCE: CONF MINUS S&S MINUS OTHADJ DOES NOT EQUAL WK-ALLOW														
- PED FUNDING IS NOT IN BALANCE: BASELINE NONFEDERAL DECREMENT CAPABILITY														
- PED FUNDING IS NOT IN BALANCE: CONF MINUS S&S MINUS OTHADJ DOES NOT EQUAL WK-ALLOW														

Optional remark lines follow here.



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ILLUSTRATION A-2.6  
EXPENDITURE PROGRAM CEILINGS  
(\$000)

MSC	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12
MVD	16,400	16,800	17,200	17,700	18,100	18,600	19,000	19,500	20,000	20,500
NAD	14,900	15,200	15,600	16,000	16,400	16,800	17,200	17,700	18,100	18,600
NWD	8,700	8,900	9,200	9,400	9,600	9,900	10,100	10,400	10,600	10,900
LRD	14,400	14,700	15,100	15,500	15,800	16,200	16,600	17,100	17,500	17,900
POD	3,600	3,700	3,800	3,900	4,000	4,100	4,200	4,300	4,400	4,500
SAD	8,200	8,400	8,600	8,800	9,100	9,300	9,500	9,700	10,000	10,200
SPD	25,600	26,300	26,900	27,600	28,300	29,000	29,700	30,500	31,200	32,000
SWD	11,300	11,600	11,800	12,100	12,400	12,800	13,100	13,400	13,700	14,100

SUBAPPENDIX A-3  
CECW PROGRAMMED ITEMS

A-3.1. **Required Field Input.** This subappendix provides necessary guidance on CECW programmed General Investigations items. The following table identifies the items which require District and Division response, hard copy only.

Activity	Cat/Class/ Subclass
a. Special Investigations	(Code 901-171)
b. Gulf of Mexico Program	(Code 901-171)
c. Pacific Northwest Forest Case Study	(Code 901-171)
d. Chesapeake Bay Program	(Code 901-171)
e. FERC Licensing Activities	(Code 901-172)
f. Interagency Water Resources Development	(Code 901-173)
g. National Estuary Program	(Code 901-175)
h. North American Waterfowl Management	(Code 901-176)
i. Interagency and International Support	(Code 901-178)
j. Coordination with Other Water Resources Agencies	(Code 901-181)
k. CalFed	(Code 901-181)
l. Lake Tahoe Federal Interagency Partnership	(Code 901-181)
m. Planning Assistance to States	(Code 901-186)
n. International Waters Studies	(Code 901-240)
o. Flood Plain Management Services	(Code 901-250)
p. Hydrologic Studies	(Code 901-260)

A-3.2. **Program Procedure.**

a. The activities covered by this subappendix are programmed by CECW. You should assume your allowances will remain at or about the same level as PY-2 through PY+9 in preparing programming documents for the fifteen activities requiring Division response.

b. If a division is experiencing conditions that would materially affect its requirements for the activities covered, the Division Commander should submit a brief letter to HQUSACE, CECW-BW outlining the changed conditions.

c. Note that there are three accounts that are similar, in that they provide the ability to respond to other entities without being either agency or project/study specific, but that serve different functions. They are Special Investigations, Interagency Water Resources Development, and Coordination with Other Water Resources Agencies. Special Investigations is for limited scope investigations, not for coordination. Interagency Water Resources Development is for coordination with others on problems that may lead to specific studies such as cost sharing or applicability of Corps programs to water resources problems. The Coordination with Other Water Resources Agencies account is for coordination with Planning Commissions, other Federal Water Resources Agencies or other entities which serve that function, on regional problems of a general nature not related to a programmed study or specific potential study. Some requests for assistance will not fit clearly into one of these three accounts, but you should be sure that, to the extent possible, such

activities are programmed in the appropriate account and that activities in the three accounts are not duplicative.

**A-3.3. Submission Requirements.** Provide a breakdown by District for each activity listed in paragraph A-3.1, for PY-1 and PY in the format of Illustration A-3.1. The information should provide a base to develop allowances for varying program levels.

**A-3.4. Special Investigations.**

a. **Program Objective.** This category is for investigations of limited scope, in replying to requests from sources outside the Corps of Engineers, for information relating to unauthorized projects and other activities which have no funds, and which are not accomplished with a view toward determining whether a project can be developed. Also included is work specifically authorized by the Chief of Engineers; the review of reports and Environmental Impact Statements requested by other agencies, unless otherwise provided for; and attendance at meetings of local interests and other agencies during the preliminary stages of project investigations.

(1) The program objective specifically includes The Gulf of Mexico Program, which is an interagency effort for resolving complex environmental problems associated with man's use of the Gulf of Mexico. This program is limited to divisions and subordinate districts bordering on the Gulf of Mexico.

(2) The program objective specifically includes the Pacific Northwest Forest Case Study, which is an interagency program initiated by the White House's Council on Environmental Quality for ecosystem management of the public lands within the range of the Northern Spotted Owl.

(3) The program objective specifically includes the Chesapeake Bay program, which is an interagency program initiated by the U.S. Environmental Protection Agency, for the protection and restoration of the bay's natural resources. Work which requires Section 510 of the Water Resources Development Act of 1996 authorization is subject to the cost sharing of that authorization.

b. **Narrative Paragraph Submission.** A narrative paragraph should be submitted which describes specific investigations, studies, or tasks accomplished under this activity for the PY-3 and PY-2 to date in the format of Illustration A-3.2.

**A-3.5. FERC Licensing Activities.**

a. **Program Objective.** The objective of the Federal Energy Regulatory Commission licensing activities is to provide timely review of FERC license and permit applications consistent with regional and national priorities. Review is accomplished on a first come-first served basis.

b. **Eligibility.** License or permit applications are eligible for consideration if they are for new or existing non-Corps operated facilities. Review of license and permit applications which could have an effect on ongoing projects under construction or being operated by the Corps should be accomplished with available project funds.

**A-3.6. Interagency Water Resources Development.** The interagency water resources development program is for Corps of Engineers districts activities, not otherwise funded, that require coordination effort with non-Federal interests. These activities include such things as meeting with City, County and state officials to help them solve water resources problems when

they have sought advice or to determine whether or not Corps programs are available and should be used to address the problems. The funds would also be used to cover costs of meeting with potential study sponsors prior to programming for study to insure they fully understand study cost sharing and to obtain an indication of their interest in participating in a future study.

**A-3.7. National Estuary Program (NEP).** The NEP is an interagency planning program to develop management plans for nationally significant estuaries designated by EPA. To date, the following 23 estuaries have been designated under the program: Columbia River, WA & OR; Mobile Bay, AL; Morro Bay, CA; Charlotte Harbor, FL; Maryland Coastal Bays, MD; New Hampshire Estuaries, NH; Barnegat Bay, NJ; Puget Sound, WA; Delaware Bay, DE; Delaware Inland Bays, DE; New York/New Jersey Harbor, NY-NJ; Sarasota Bay, FL; Santa Monica Bay, CA; San Francisco Bay, CA; Galveston Bay, TX; Albemarle/Pamlico Sound, NC; Buzzards Bay, MA; Narragansett Bay, RI; Long Island Sound, CT-NY; Peconic Bay, NY; Massachusetts Bay, MA; Barataria/Terrebonne Bay, LA; and Indian River Lagoon, FL. Because of extensive Corps involvement with Federal water resources projects in the nation's estuaries and other responsibilities in waters of the U.S., the Corps has been asked to participate on the management and technical advisory committees of those NEP estuaries being studied. The requested funds will be used to cover costs of Corps field office meeting attendance, field reconnaissance, and data transfer.

**A-3.8. North American Waterfowl Management Program (NAWMP).** The NAWMP is an international program designed to reverse downward trends in North America's waterfowl populations by protecting and improving waterfowl habitats nationwide, particularly in 34 areas within the United States identified as being critical to meeting NAWMP goals and objectives. Department of the Army support to the NAWMP is set forth in an agreement signed with the Department of the Interior on January 23, 1989. The Corps of Engineers has broad water resources development responsibilities and authorities, and has stewardship responsibilities for over seven million acres of water and land. Many Corps of Engineers projects contribute directly or indirectly to the habitat base for the nation's waterfowl and other wetland species. The requested funds will be used to cover costs of Corps of Engineers field office participation in field trips, interagency coordination meetings, and information transfer in response to conditions set forth in the agreement between the Department of the Interior and the Department of the Army.

**A-3.9. Interagency and International Support.**

a. **Program Objective.** Authorized by Section 234 of the Water Resources Development Act of 1996, this program is for activities in support of other Federal agencies or international organizations to address problems of national significance to the United States.

b. **Submission Requirements.** An illustration A-3.6 titled Interagency and International Support is required. Illustration A-3.6 is an information display with supporting narrative in the format of Illustration A-3.4. The narrative should identify the work that would be pursued with the requested fund.

**A-3.10. Coordination with Other Water Resources Agencies** (including Department of Agriculture, Natural Resources Conservation Service; Department of Interior, Bureau of Reclamation; and Regional Planning Commissions and Committees Programs).

a. **Program Objective.** The objective of this program is to provide coordination with these agencies on water resources issues and problem areas of mutual concern that are general in nature and not part of a programmed project or study.

b. **CalFed.** The program objective specifically includes the CALFED Bay-Delta Program solution process for the development of a long -term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system.

c. **Lake Tahoe Federal Interagency Partnership.** The program objective includes Corps participation in the partnership with other Federal Agencies, in accordance with Executive Order 13057 "Federal Actions in the Lake Tahoe Region", to insure cooperation, support and synergy.

#### A-3.11. **Planning Assistance to States.**

a. **Program Objective.** The Planning Assistance to States program is carried out in accordance with the provisions of Sec. 22, PL 93-251. This public law authorizes the Chief of Engineers to cooperate with States (Commonwealths, Territories, etc.) and Indian tribes in the preparation of plans for the development, utilization, and conservation of water and related land resources of drainage basins located within the boundaries of the state. Assistance is provided on the basis of State or tribe requests. When a state or tribe is served by more than one division, the Lead Division assigned in Table 2-5, ER 1105-2-100, has the responsibility for providing data on work requested by that state or tribe. The Lead Division may further delegate that responsibility to a Coordinating District, but that Coordinating District is responsible for coordinating not only with the State or tribe, but also with the other Districts doing work for that State or tribe.

b. **Submission Requirements.** Planning assistance is coordinated and scheduled to ensure the continuation and completion of ongoing work and the timely initiation of new work requested by the States and tribes. Lead Division offices should provide a prioritized listing of all work for states and tribes under their responsibility in the format of Illustration A-3.3.

#### A-3.12. **International Waters Studies.**

a. **Program Objective.** This program contributes to better control, utilization, and orderly development of jointly - controlled water resources along the U.S. - Canadian boundary. It encompasses four boards and one committee established by the International Joint Commission (IJC) and in response to other U.S./Canadian cooperative efforts. IJC boards fall into two broad categories: boards of control, which are essentially permanent; and engineering or advisory boards, which are usually dissolved after completing their investigation.

b. **Eligibility.** Activities within the scope of authority of an appropriate Board or committee are eligible for funding.

c. **Submission Requirements.** An information display and supporting narrative as shown in Illustration A-3.4 is required.

#### A-3.13. **Flood Plain Management Services (FPMS).**

a. **Program Objective.** The Corps is authorized by Section 206 of the 1960 Flood Control Act, as amended, to provide information, technical assistance, and guidance, in identifying the magnitude of the flood hazard and for planning wise use of the flood plain. Direct response and

assistance are provided through the FPMS program to states, Indian tribes and local governments without charge and to Federal agencies and private persons on a cost reimbursable basis.

b. **Submission Requirements.** An information table as shown in Illustration A-3.5 is required. FPMS funding requirements are to be shown for (1) the Division FPMS Unit, (2) District FPMS Units, (3) Quick Responses taking 10 minutes or less and provided without charge, (4) Technical Services, and (5) Special studies. An estimated cumulative number of responses to requests will be shown for Quick Responses and Technical Services. Submit two versions of Illustration A-3.5; one for the PY-2 amount and another based on capability to meet demand from state, tribal and local governments. The funding requirements for Quick Responses should not exceed two percent of the PY-2 work allowance amount. Hurricane Evacuation Study (HES) funding will be retained by HQUSACE for allotment at a later date. Full reimbursement should be required for assistance to Federal agencies and private persons. Information provided for Illustration A-3.5 should exclude all requirements for HES and for assistance to Federal agencies and private persons.

#### A-3.14. **Hydrologic Studies.**

a. **Program Objectives.** To collect and analyze basic data on hydrologic, climatologic, and river morphology for general use in connection with the Corps planning design, construction, and operation of water resource projects.

b. **Submission Requirements.** Provide a breakdown by District in the format of illustration A-3.1. Note that all activities in this class ( 260 ) should be defined and reported as follows:

(1) **261, Storm Studies.** Includes Part I and II storm studies accomplished in coordination with National Weather Service.

(2) **262, General Hydrologic Studies.** Includes generalized hydrologic analyses of rainfall - runoff relationship, flood frequency, snowmelt studies, hydrograph development and routing at selected watersheds, model calibrations in urban areas, and analyses of past floods and other studies of hydrologic nature.

(3) **263, Sedimentation Studies.** Includes all non-project sedimentation investigation activities at the Waterways Experiment Station.

(4) **264, Streamflow and Rainfall Data Collection.** This continuing program provides for installation and operation of streamflow and rainfall gages for general studies. It also provides for flood investigation activities such as investigation of hurricane surges; high water mark setting, measurement, and recordings; and rainfall bucket surveys.

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ILLUSTRATION A-3.1  
DISTRICT BREAKDOWN  
(Code 901-171,172,173,175,176,177,178,181,186,240,250,260)  
(\$K)

Division: \_\_\_\_\_

Tentative Allowance

Total  
DIST.-A  
DIST.-B  
DIST.-C  
etc

PY-1  
PY

SPECIAL INVESTIGATIONS  
(AND)  
GULF OF MEXICO PROGRAM  
(AND)  
PACIFIC NORTHWEST FOREST CASE STUDY  
(AND)  
CHESAPEAKE BAY PROGRAM  
(AND)  
FERC LICENSING  
(AND)  
INTERAGENCY WATER RESOURCES DEVELOPMENT  
(AND)  
NATIONAL ESTUARY  
(AND)  
NORTH AMERICAN WATERFOWL MANAGEMENT

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)

ILLUSTRATION A-3.1 (Continued)  
DISTRICT BREAKDOWN  
(Code 901-171,172,173,175,176,177,181,186,240,250,260)  
(\$K)

Division: \_\_\_\_\_

Tentative Allowance

Total  
DIST.-A  
DIST.-B  
DIST.-C  
etc

PY-1  
PY

(AND)  
INTERAGENCY AND INTERNATIONAL SUPPORT  
(AND)  
COORDINATION WITH OTHER WATER RESOURCES AGENCIES  
(AND)  
CALFED  
(AND)  
LAKE TAHOE FEDERAL INTERAGENCY PARTNERSHIP  
(AND)  
PLANNING ASSISTANCE TO STATES  
(AND)  
INTERNATIONAL WATER STUDIES  
(AND)  
FLOOD PLAIN MANAGEMENT SERVICES  
(AND)  
HYDROLOGIC STUDIES  
SUBCLASS  
PY-1  
PY

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(To be typed as necessary)



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ILLUSTRATION A-3.2  
WORK ACCOMPLISHED  
(Code 901-171)

Division: \_\_\_\_\_

**SPECIAL INVESTIGATIONS**

<b>DISTRICT</b>	<b>NARRATIVE DESCRIPTION</b>
-----------------	------------------------------

A	PY-3:
A	PY-2:

B	PY-3:
B	PY-2:

etc.

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)

ILLUSTRATION A-3.3  
PLANNING ASSISTANCE TO STATES  
(Code 901-186)  
Priority Listing  
Fiscal Year\_\_\_\_\_

Lead Division: \_\_\_\_\_

Work Item Name	State	State Priority	Performing Office	Amount (\$000)
<u>1/</u>			<u>2/</u>	

1/ List work items in order of decreasing priority as established by the Lead Division.  
2/ Priority as indicated by the State.

FOR ILLUSTRATION PURPOSE ONLY  
(To be typed as necessary)

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ILLUSTRATION A-3.4  
INTERNATIONAL WATERS STUDIES  
(Code 901-240)

Division: \_\_\_\_\_

**Justification:** Furnish a brief description of the Division/Districts activities and potential accomplishments relating to the functions of each board or committee. Include the associated program request for each board.

FOR ILLUSTRATION PURPOSE ONLY  
(To be typed as necessary)

ILLUSTRATION A-3.5  
FLOOD PLAIN MANAGEMENT SERVICES  
(Code 901-250)

Division: \_\_\_\_\_

Work Item	Amount (\$000)	Total # Responses/Studies
Division FPMS Unit	N/A	
District FPMS Units	N/A	
Quick Responses	(5% Max.)	(# of <del>R</del> esponses)
Technical Services		(# of <del>R</del> esponses)
Special Studies		(# of <del>S</del> tudies)

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)

APPENDIX B  
CONSTRUCTION, GENERAL AND  
FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES  
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SUBAPPENDIX B-1  
CONSTRUCTION, GENERAL AND  
FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES  
APPLICABILITY  
(RCS CECW-B 13)

**B-1.1. Appropriation Title.** This appendix provides guidance for preparation of the program request for all new and continuing activities under the appropriation titles Construction, General (CG), including the Inland Waterways Trust Fund (IWTF) and ~~Harbor Services Fund (HSF)~~ Harbor Maintenance Trust Fund (HMTF), as applicable, and Flood Control, Mississippi River and Tributaries for a ten year period, PY through PY+9.

**B-1.2. Activities Included.**

Activity	Category, Class, Subclass, Code	Guidance Provided in Subappendix Number
Construction, General Appropriation		
Navigation		
Channels and Harbors		
Projects Specifically Authorized by Congress	211	B-2
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Dam Safety Assurance	240	B-2

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Activity	Category, Class, Subclass, Code	Guidance Provided in Subappendix Number
Shore Protection		
Projects Specifically Authorized by Congress		
Sacrificial Features Only	411	B-2
Structural and Sacrificial Features	412	B-2
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Flood Control		
Local Protection		
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Urban Stormwater Management		
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Dam Safety Assurance	540	B-2



Activity	Category, Class, Subclass, Code	Guidance Provided in Subappendix Number
Riverine Ecosystem Restoration and Flood Hazard Mitigation	552	No field request
Multiple Purpose Power	600	B-2
Dam Safety Assurance	640	B-2
Miscellaneous		
Recreation Facilities at Completed Projects		
Sanitation Facilities, Non-Cost Sharing	711	Transferred to the Operation and Maintenance program
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Recreation Modernization Program	715	B-4
Project Modifications for Improvement of the Environment (Section 1135, 1986 Act)		
Specifically Funded	721	B-2
Not Specifically Funded	722	B-3
Dam Safety Assurance and Seepage/Stability Correction Projects Not Previously Programmed for Construction	730	No field request
Aquatic Ecosystem Restoration	732	B-3
Aquatic Plant Control	740	No field request
Employee Compensation Fund (Payments to Department of Labor)	750	No field request
Wetlands Restoration and Enhancement Demonstration Program (Section 307 (d), 1990 Act)		
Specifically Funded	761	Program not active
Not Specifically Funded	762	No field request

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Activity	Category, Class Subclass, Code	Guidance Provided in Subappendix Number
Environmental Improvement Projects	770	B-2
Environmental Mitigation, Restoration, and Protection	771	B-2
Environmental Infrastructure	772	B-2
Shoreline Erosion Control Demonstration (Section 54, 1974 Act)	780	Authorization expired
Beneficial Uses of Dredged Material (Section 204, 1992 Act)		
Specifically Funded	791	B-2
Not Specifically Funded	792	B-3
Rehabilitation		
Major Rehabilitation		
Navigation		
Channels and Harbors	813	B-2
Locks and Dams	814	B-2
Flood Control		
Local Protection Projects Specifically Authorized by Congress	816	B-2

Activity	Category, Class, Subclass, Code	Guidance Provided in Subappendix Number
Reservoirs	817	B-2
Multiple Purpose Power Projects	818	B-2
Minor Rehabilitation	820	Program not active
New Construction Starts	As applicable	B-2
New Major Rehabilitation	As Applicable	B-2
Flood Control, Mississippi River and Tributaries, Appropriation		
Navigation	310	B-2
Dam Safety Assurance	314	B-2
Flood Control	320	B-2
Dam Safety Assurance	324	B-2
Streambank Erosion Control Evaluation and Demonstration (Section 32, 1974 Act)	330	Authorization expired
Major Rehabilitation		
Navigation	812	B-2
Flood Control	815	B-2
New Construction Starts	As applicable	B-2
New Major Rehabilitation	As Applicable	B-2



## SUBAPPENDIX B-2 CONSTRUCTION - NEW AND CONTINUING

**B-2.1. Objective.** This subappendix applies to new and continuing construction projects, new and continuing major rehabilitation projects, new and continuing recreation area modernization projects, new and continuing dam safety assurance projects, new and continuing deficiency correction projects, new and continuing reconstruction projects, new and continuing dredged material disposal facility projects, new and continuing reimbursement projects, resummptions, unstarted projects previously funded for construction, and unstarted separable elements of ongoing construction projects funded under the Construction, General (CG) appropriation, including the Inland Waterways Trust Fund (IWTF) and ~~Harbor Services Fund (HSF)~~ Harbor Maintenance Trust Fund (HMTF), as applicable, and the Flood Control, Mississippi River and Tributaries (MR&T) appropriations. The overall goal for the construction program is to develop a 10 year (PY through PY+9) construction program and complete committed projects as economically and quickly as practicable within program constraints and consistent with current national priorities. The major objective is to maintain, insofar as possible, a Baseline Level project construction schedule. We will adhere to Army policy and the guidance provided in the main part of the EC. Nevertheless, program requests should be submitted for all available new start projects and separable elements which meet the preliminary selection criteria in Table B-2.1 and all continuing projects and programs including environmental infrastructure programs. This will provide information for use in making program decisions on projects and programs for which funds may be added by Congress in PY-1. We will undertake all projects and programs included in the President's PY-1 program ~~and continue to nourish shore protection projects for which project cooperation agreements were executed prior to FY96 until the expiration date of the renourishment period specified in the project cooperation agreements~~

### **B-2.2. Assumed PY-1 Work Allowances and Assumed PY-1 and PY Assigned Savings and Slippage.**

a. Assumed PY-1 work allowances must be based on a proportional assignment of savings and slippage applied against the amount included for each project in the conference report which accompanies the PY-1 appropriations act, or the PY-1 program in the absence of Congressional action on the PY-1 appropriations, except for projects directed to be undertaken with amounts specified in the PY-1 appropriations act which are not subject to savings and slippage. Projects may show a reprogramming of funds to offset the assigned savings and slippage amount, if necessary. However, such reprogrammings must be within HQUSACE CECW-B authority and must be offsetting within each Division. Assumed PY-1 savings and slippage reductions are shown on Table B-2.3. Final savings and slippage reductions will be based on Congressional action on the PY-1 appropriations. Federal and non-Federal funding information (including allocations, contributions, obligations, undelivered orders, and unobligated carryovers) shown on required supporting data for each project for which funds are requested in the PY must be reconciled with the latest available financing and accounting records. After PY-1 work allowances have been allotted, allocations for the PY-1 must also be reconciled with the latest available finance and accounting records for affected projects.

### **B-2.3. New Start Construction Projects.**

a. The first objective of the new start program is to bring together for consideration as new start construction recommendations a list of high quality projects and separable elements, justified based on NED benefits or responsive to mitigation, restoration, or protection of environmental resources, which are ready to be started in the PY, have approved M-CACES baseline cost estimates, and are strongly supported by non-Federal sponsors. Projects and separable elements which meet the basic and preliminary selection criteria listed in Table B-2.1 may be recommended as new construction starts. Note that a current economic analysis for each new start construction project or element must be approved not

earlier than 3 fiscal years prior to the fiscal year of the submission of the program request to HQUSACE CECW-B. This will ensure the analysis can be considered current when the actual program decisions are made and help preclude the need for an additional update prior to an implementation decision (i. e., executing a PCA). For example, a PY new start program request made in PY-2 must have an economic analysis contained in an official report approved in or later than PY-5. This analysis will be included in an approved decision document such as a Chief of Engineers Report, Engineering Documentation Report (EDR), General or Limited Reevaluation Report (GRR or LRR), Post Authorization Change Report (PAC), or other special study report which must be approved by the MSC or HQUSACE CECW-E, CECW-O<sub>2</sub> or CECW-P, as applicable. A Design Documentation Report (DDR) is a technical document approved by a District and should not include information such as formulation of alternatives or economic analyses. A decision document that includes technical design information together with formulation of alternatives or economic analyses should be properly labeled as an LRR, GRR, EDR, or PAC, as applicable. After a decision has been made by the Director of Civil Works and ASA(CW) to include a project, separable element, resumption, or unstarted project in the PY program and construction funds have been appropriated for such work, no further update of the economic analysis will be required during the approval process for the non-Federal sponsor's financing plan and execution of the PCA provided the PCA is approved in the PY and no significant changes which may effect economic justification have been made from the latest approved document. The same current economic analysis requirements for PCA projects apply to non-PCA projects, such as inland navigation and major rehabilitation projects, for obtaining approval to initiate construction. Program requests should be submitted for all available new start projects and separable elements which meet the preliminary selection criteria in Table B-2.1. This will provide information for use in making program decisions on projects for which funds may be added by Congress in PY-1.

b. Potential new starts candidates should be reviewed relative to the prioritization criteria shown in Table B-2.1. There are 6 priority levels; each level differentiates the relative compliance (as shown by an X) with each of the screening criteria: economic considerations, environmental considerations, and mitigation, restoration, or protection of environmental resources. Recommended new starts must be in priority category 1 through 3.

c. The second objective of the new start program is to develop a 10 year construction program which will provide for an orderly flow of urgently needed and locally supported projects that are in accord with current policies and priorities. In accordance with this objective, Divisions will prepare an Illustration B-2.1, Project Data Summary, for each project or separable element which they expect to recommend as a continuing project, if initial CG funding is derived from the CG Dam Safety and Seepage/Stability Correction Program or the CG Dredged Material Disposal Facilities Program, or as a new construction start during the period PY through PY+9. This includes new recreation area modernization projects, new major rehabilitation projects (including seepage or stability correction projects), new dam safety assurance projects, new deficiency correction projects, new reconstruction projects, new dredged material disposal facility projects, new reimbursement projects, resumptions, unstarted projects, and unstarted separable elements of ongoing projects. New dredged material disposal facility projects will not be budgeted separately, but will be funded from the Dredged Material Disposal Facilities Program. Nevertheless, Divisions will prepare an Illustration B-2.1 for these projects. Divisions will also prepare an Illustration B-2.1, Project Data Summary, for each unprogrammed separable element which has not been reclassified to the inactive category. The fiscal year of new start construction for such separable elements will be 2099. Non-Federal cash contributions and non-Federal other costs must not be programmed for any new start project or separable element in advance of programmed Federal funds even though the non-Federal sponsor may incur costs prior to the allocation of Federal funds. Such non-Federal costs will be reflected in the Illustration B-2.1 and Detailed Project Schedule, PB-2a, only after Federal funds are allocated. Individual Illustrations B-2.1 prepared for programmed and unprogrammed separable elements will be rolled up into their parent projects by PRISM. The projects programmed for construction in PY through

PY+9 must be based on the estimates and schedules established for programmed studies and PED projects, as applicable. Furthermore, Divisions must assure that the data shown in Illustration B-2.1 are compatible with data in Illustration A-2.5, General Investigations Data Summary Table, so that construction is programmed no earlier than the year following PED completion and project cost estimates in both illustrations are identical. We intend to adhere to programmed PED completion schedules to the maximum extent possible and select future new starts from projects shown as available for construction in the PY+1 based on data which supports the President's program for the preceding year.

d. Each recommended new start construction project or separable element requires submission of a decision document to serve as the basis for new start selection and executing the PCA required by the Water Resources Development Act of 1986, as amended. This requirement can be satisfied by an approved EDR, as applicable, or a MSC or HQUSACE CECW-P approved GRR, as applicable, or HQUSACE CECW-P approved feasibility report with engineering appendix. In negotiating the terms of the PCA, no commitments relating to a construction schedule or follow-on funding can be made to the non-Federal sponsor until after the economic analysis, if applicable, and the EDR or feasibility report with engineering appendix has been approved by the MSC or HQUSACE CECW-E or CECW-P, as applicable, the planning and policy review process has been completed by ASA(CW), the project or element has been included in the PY program, and the draft PCA has been approved by ASA(CW). The PCA will be executed between the non-Federal sponsor and ASA(CW) after funds are appropriated for construction and prior to advertisement of the initial construction contract for the project or element.

**B-2.4. Major Rehabilitation, Dam Safety Assurance, Deficiency Correction, Reconstruction, and Dredged Material Disposal Facility, and Recreation Area Modernization Projects.**

a. Recommended new starts for major rehabilitation, dam safety assurance, deficiency correction, reconstruction, and dredged material disposal facility, and recreation area modernization projects will undergo a critical review and selection process in accordance with the criteria listed below. Reconnaissance or evaluation reports and subsequent planning, engineering, and design for major rehabilitation (except seepage or stability correction projects), deficiency correction, and reconstruction projects will be funded from Operation and Maintenance, General (O&M) funds allocated for project operation and maintenance or inspection of completed works, as applicable, until CG funds, IWTF, and HSF HMTF, as applicable, are appropriated and allocated for such projects. Reconnaissance or evaluation reports for major rehabilitation seepage or stability correction projects and dam safety assurance projects will be funded from O&M funds. Subsequent planning, engineering, and design for these projects will be funded from the CG Dam Safety and Seepage/Stability Correction Program until the next PY when they will be included in the PY request as continuing projects. Dredged material management plans for dredged material disposal facility projects will be funded from O&M funds. Subsequent planning, engineering and design, and construction for these projects will be funded from the CG Dredged Material Disposal Facilities Program until the next PY when they will be included in the PY request as continuing projects. However, no post-evaluation planning, engineering, and design for major rehabilitation, dam safety assurance, deficiency correction, reconstruction, and dredged material disposal facility projects shall be funded from O&M or CG allocations until a reconnaissance or evaluation report has been approved by HQUSACE CECW-E, CECW-P, or CECW-O, as applicable,. Preconstruction activities for PY-2 and PY-1 should be funded by reprogramming available O&M funds for applicable projects **only** after the reconnaissance or evaluation report has been approved by HQUSACE CECW-E, CECW-P, or CECW-O, as applicable. Initial CG funds, IWTF, and HSF HMTF, as applicable, will be programmed for major rehabilitation (except seepage or stability correction projects), deficiency correction, and reconstruction, and dredged material disposal facility projects after applicable reconnaissance or evaluation reports have been approved by HQUSACE CECW-E, CECW-P, CECW-O and ASA(CW), as applicable. For PY01 and later, initial preconstruction activities and initial construction work, if applicable, in the first year of CG funding, for dam safety assurance projects, major rehabilitation

seepage or stability correction projects, ~~and dredged material disposal facility projects~~ will be funded under the CG Dam Safety and Seepage/Stability Correction Program ~~or the Dredged Material Disposal Facilities Program, as applicable~~, after approval of an appropriate report. In subsequent years, all activities for these projects will be specifically funded in the PY request as continuing projects.

b. In negotiating the terms of a PCA, if required, no commitments relating to a construction schedule or follow-on funding can be made to the non-Federal sponsor until after the economic analysis, if applicable, and the reconnaissance or evaluation report has been approved by HQUSACE CECW-E, CECW-P, or CECW-O, as applicable, the planning and policy review process has been completed by ASA(CW), the project or element has been included in the PY program, and the draft PCA has been approved by ASA(CW). The PCA will be executed between the non-Federal sponsor and ASA(CW) after funds are appropriated for construction and prior to advertisement of the initial construction contract for the project.

**c. New Major Rehabilitation Projects.**

(1) ~~The FY 92 program moved major rehabilitation projects from the O&M appropriation to the CG appropriation. All new major rehabilitation projects will be funded with CG funds; however, continuing major rehabilitation projects started prior to FY 92 under O&M will be completed with O&M funds. One-half of the funding for new major rehabilitation projects for inland and coastal waterways proposed for funding in the PY will be derived from the IWTF.~~

(2) The major rehabilitation program consists of work included in one or both of two mutually exclusive categories: reliability and efficiency improvement. The threshold amounts listed below for each category are adjusted annually according to the Administration's economic assumptions.

(a) The reliability category encompasses major project feature restoration consisting of structural work on a Corps operated and maintained facility such a lock, dam, hydropower plant. etc., intended to improve the reliability of an existing structure, the result of which will be a deferral of capital expenditures to replace the structure. Rehabilitation will be considered as an alternative when it can significantly extend the physical life of the feature and can be economically justified by benefit-cost ratio analysis. The work will extend over at least two full construction seasons and will require at least \$6.0 ~~\$6.2~~ million in capital outlays. For inland waterways navigation projects, the reliability threshold will be \$9.6 ~~\$9.9~~ million.

(b) The efficiency improvement category encompasses work that will enhance operational efficiency of major project components. Operational efficiency will increase outputs beyond the original project design. Efficiency improvements will require at least \$1.18 ~~\$1.22~~ million in capital outlays on a component which does not exhibit reliability problems.

(3) The project must have an evaluation report at HQUSACE CECW-O for review by 15 March of the PY-2 in accordance with chapter 3 of ER 1130-2-500 and chapter 3 of EP 1130-2-500 with HQUSACE CECW-O and ASA(CW) approval, as applicable, expected by 1 August of the PY-2.

(4) The proposed work must require no additional Congressional authorization.

(5) ~~For PY01 and later,~~ Initial preconstruction activities and initial construction work, if applicable in the first year of CG funding, for major rehabilitation seepage or stability correction projects will be funded under the CG Dam Safety and Seepage/Stability Correction Program after approval of the evaluation report. In subsequent years, all activities for these projects will be specifically funded in the PY request as continuing projects.



**d. New Dam Safety Assurance Projects.**

(1) The project must have an evaluation report, including a base safety standard analysis, approved by HQUSACE CECW-E and ASA(CW), as applicable, or at HQUSACE CECW-E for approval, as applicable, by 1 June of the PY-2 with HQUSACE CECW-E and ASA(CW) approval, as applicable, expected by 1 August of the PY-2 to be considered for inclusion in the PY program as a continuing project.

(2) The proposed work must require no additional Congressional authorization.

(3) ~~For PY01 and later,~~ Initial preconstruction activities and initial construction work, if applicable in the first year of CG funding, for dam safety assurance projects will be funded under the CG Dam Safety and Seepage/Stability Correction Program after approval of the evaluation report. In subsequent years, all activities for these projects will be specifically funded in the PY request as continuing projects.

**e. New Deficiency Correction Projects.** The threshold for using CG funds at Corps of Engineers operated and maintained projects recommended for new start deficiency corrections is \$5 million. Deficiencies with an estimated total cost of less than \$5 million at Corps of Engineers operated and maintained projects will be corrected using O&M funds.

(1) For non-Federally operated and maintained projects with an estimated total cost less than \$5 million for which the reconnaissance report recommends cost sharing in accordance with the concepts reflected in the Water Resources Development Acts of 1986, as amended, and 1996, the project must have a reconnaissance report approved by HQUSACE CECW-E, as applicable, or at HQUSACE CECW-E for approval, as applicable, by 1 June of the PY-2 with HQUSACE CECW-E approval, as applicable, expected by 1 August of the PY-2.

(2) For both Corps of Engineers and non-Federally operated and maintained projects with an estimated cost equal to or greater than \$5 million or for which the reconnaissance does not recommend cost sharing in accordance with the concepts reflected in the Water Resources Development Acts of 1986, as amended, and 1996, the project must have a reconnaissance report approved by HQUSACE CECW-E and ASA(CW) , as applicable, or at HQUSACE CECW-E for approval, as applicable, by 1 June of the PY-2 with HQUSACE CECW-E and ASA(CW) approval, as applicable, expected by 1 August of the PY-2.

(3) The proposed work must require no additional Congressional authorization.

**f. New Reconstruction Projects.**

(1) Older projects that are properly operated and maintained by non-Federal sponsors but are no longer performing satisfactorily primarily due to their advanced age may be considered for reconstruction. The proposed work will insure that the project continues to deliver the full benefits intended by Congress at the time of authorization; will not expand or change the authorized scope, function, or purpose of the project; and is not operation and maintenance typically associated with a project or corrective work required due to improper maintenance on the part of the non-Federal sponsor.

(2) The project must have a reconnaissance report approved by HQUSACE CECW-P and ASA(CW), as applicable, or at HQUSACE CECW-P for approval, as applicable, by 1 June of the PY-2 with HQUSACE CECW-P and ASA(CW) approval, as applicable, expected by 1 August of the PY-2.

(3) The proposed work must require no additional Congressional authorization.

**g. New Dredged Material Disposal Facility Projects.**

(1) Section 201 of the Water Resources Development Act of 1996 provides that the cost of constructing land based and aquatic dredged material disposal facilities that are necessary for the disposal of dredged material for the construction and operation and maintenance of Federal navigation projects for harbors and inland harbors will be shared as a general navigation feature of the project in accordance with Section 101 (a) of the Water Resources Development Act of 1986, as amended,. Beginning with the FY 99 program, the Federal share of all dredged material disposal facilities for existing navigation projects for which a construction contract for the dredged material disposal facility was not awarded on or before 12 October 1996 will be funded with CG funds. However, continuing dredged material disposal facility projects started prior to FY 99 will be completed with O&M funds. All Federal funding for dredged material disposal facilities for maintenance of existing Federal navigation projects for harbors and inland harbors, whether funded from O&M or CG funds, is reimbursable from the HSF HMTE.

(2) Dredged material disposal facility needs will be identified through O&M funded dredged material management planning activities. Guidance on development, review, approval, and implementation of dredged material management plans is contained in EC 1165-2-200. An advance copy of the EC was distributed by CECW-A/CECW-O/CECW-P memorandum, 19 August 1994, subject: Implementation of Guidance on Dredged Material Management Plans (EC 1165-2-200, Advance Copy dated 21 July 1994) ER 1105-2-100. A feasibility level decision document on the dredged material disposal facilities proposed for Corps construction will be submitted to HQUSACE CECW-O for review and approval, including ASA(CW) approval, as applicable,. This report could be a completed dredged material management plan or an interim report.

(3) The project must have an appropriate report approved by HQUSACE CECW-O and ASA(CW) , as applicable, or at HQUSACE CECW-O for approval, as applicable, by 1 June of the PY-2 with HQUSACE CECW-O and ASA(CW) approval, as applicable, expected by 1 August of the PY-2 to be considered for inclusion in the PY program as a continuing project.

(4) For ~~PY99~~ PY02 and later, ~~initial~~ preconstruction activities and ~~initial~~ construction work ,if applicable in the first year of CG funding, for new dredged material disposal facility projects will be funded under the CG Dredged Material Disposal Facilities Program after approval of the dredged material management plan. ~~In subsequent years, all activities for these projects will be specifically funded in the PY request as continuing projects.~~

**h. New Recreation Area Modernization Projects**

(1) The recreation area modernization program (RAMP) is defined as the renovation and updating of Corps managed recreation areas to meet the needs of present users, underserved populations, and future generations. Modernization of recreation facilities with state of the art materials and designs can reduce the cost of future maintenance, as well as eliminate much of the costly maintenance backlog.

(2) Funding for the modernization program will be through the CG appropriation except for initial preparation of the proposals and subsequent engineering and design work, which will be accomplished with O&M funds until CG funds are allocated.

(3) An Illustration B-2.1, Project Data Summary and Illustration B-2.4, Justification Sheet must be submitted for each proposed new start RAMP project. The Illustration B-2.4 must include the following information:

- a. The name of the water resources project and the recreation area.
- b. The annual visitation to this recreation area for the last five years (visitors/year)
- c. The projected annual visitation following modernization of the area (visitors/year).
- d. Clear evidence of public involvement and support of modernization of the area.
- e. The ability to execute modernization of the recreation area in the budget year.
- f. The impact of the modernization of the recreation area on the local and regional economy.
- g. The current condition of the recreation area. Include both facility and management problems that may be occurring and historic utilization levels of the area.
- h. The annual recreation revenues from this recreation area for the last five years (both camping and day use).
- i. The projected annual recreation revenue following modernization of the area (both camping and day use).
- j. The modernization actions proposed for the recreation area.
- k. The projected cost of the modernization by major action (include E&D).
- l. Any projected O&M savings that will result from the modernization of this recreation area (\$ per year).

(4) The RAMP proposals will be evaluated using the following criteria:

- a. Meets local and regional needs based on public involvement input.
- b. The impact on recreation revenues.
- c. The impact on long-term O&M (O&M cost savings, consolidation, etc.)
- d. The reduction/elimination of environmental degradation.
- e. Accessibility for persons with disabilities.
- f. Cures safety and public health problems.
- g. Facilities within the recreation area will meet minimum Corps facility standards following modernization.

**B-2.5. Reimbursement Projects.** Requests for PY funds for construction reimbursement payments to local interests will be submitted as part of the continuing construction program only for reimbursement projects which have previously received an allocation of construction funds for prior reimbursements. Requests for PY funds for reimbursement projects which have not received a prior allocation of construction funds for reimbursement will be submitted as new start construction projects in accordance with the guidance in this subappendix. PY requests may be for all or part of the unfunded Federal share

of construction costs on projects, or useful units thereof, which have been completed or are scheduled to be completed as of 30 September of the PY-1, exclusive of previous and anticipated payments for funded work scheduled for completion through the PY-1.

**B-2.6. Separable Elements of Ongoing Construction Projects, Resumptions, and Unstarted Projects Previously Funded for Construction.**

a. A separable element is a portion of a project which is physically separable from other portions of the project, and which achieves hydrologic effects or produces physical or economic benefits which are separately identifiable from those produced by other portions of the project. **Each item which requires a PCA or memorandum of agreement (MOA) or requires an amendment to such an existing document will be treated as a separable element.**

b. Unstarted separable elements that are not economically justified at the current discount rate, excluding recreation benefits and costs, must not be programmed for planning, engineering and design or construction. Planning, engineering and design and construction for separable elements that are economically justified at the current discount rate excluding recreation benefits and costs may be programmed in the period PY through PY+9. **However, information required for PY new construction starts must be submitted for such separable elements for the PY in which they are programmed to initiate construction.** Unstarted separable elements, both programmed and unprogrammed, as applicable, must reflect the cost sharing and financing concepts in the Water Resources Development Acts Of 1986, as amended, and 1996.

c. Although funds for separable elements of ongoing construction projects are not programmed on an individual basis and are included as part of the program requests for their parent projects, each active uncompleted separable element, whether programmed or unprogrammed, must be shown individually, similar to a subproject in the Project Cost Estimate, PB-3, and Detailed Project Schedule, PB-2a, which are prepared for each parent project. Each such separable element must include its applicable construction costs plus its associated planning, engineering and design and construction management costs. Total Federal and non-Federal costs for each separable element must also be shown on the PB-3 and PB-2a. Furthermore, the method of financing for Federal and non-Federal funds for each separable element must also be shown on the PB-2a. In addition to the separable elements identified during previous program submissions, all other uncompleted separable elements must be shown on PB-3s and PB-2a's, even if funds are not requested for the separable elements in the PY. Also, a separate Illustration B-2.1, Project Data Summary, must be prepared for each separable element shown on the PB-3 and PB-2a. In addition, Illustration B-2.4, PY Justification Sheet must be submitted for each unstarted separable element recommended for funding for construction in the PY. For this purpose, unstarted separable elements are those that will not have construction work under contract by 30 September of the PY-1.

d. Resumptions are projects on which construction was stopped but can now be resumed. Unstarted projects are projects that were previously funded for construction but not physically started. For this purpose, resumptions and unstarted projects are those that will not have construction work under contract by 30 September of the PY-1, were not included in the PY-1 program, or were not funded in the conference report which accompanied the PY-1 appropriations act.

e. Economic analyses supporting PY funding requests for the early stages of planning, engineering and design for unstarted separable elements, resumptions, and unstarted projects should be presented as follows: Costs should be updated to current price levels. Benefits should be those reported in the latest approved evaluation, e.g., EDR or reevaluation report, and must not be price indexed in any case except for specific benefit categories such as roads, bridges, and rail lines provided that these benefits do not

constitute a major portion of overall benefits. The total BCR at the applicable and current discount rates will be computed in the following manner: deflate the updated project cost to the price level of the latest approved detailed economic evaluation using adjustments for price level changes experienced in the interim period. The CWCCIS and ENR indices are both acceptable for use in deflating project costs. Next, annualize the deflated project cost at each discount rate and divide the costs into the benefits which also must be annualized at each discount rate. Economic analyses supporting PY funding requests for construction of unstarted separable elements, resumptions, and unstarted projects must be contained in an official report approved in or later than PY-5. In no case should the benefits be price indexed except for specific benefit categories such as roads, bridges, and rail lines provided that these benefits do not constitute a major portion of overall benefits. After a decision has been made by the Director of Civil Works and ASA(CW) to include a separable element, resumption, or unstarted project in the PY program and construction funds have been appropriated for such work, no further update of the economic analysis will be required during the approval process for the non-Federal sponsor's financing plan and execution of the PCA provided the PCA is approved in the PY and no significant changes which may effect economic justification have been made from the latest approved document.

f. Unstarted separable elements, resumptions, and unstarted projects being considered for construction will undergo the same critical review and selection process as new start construction projects in accordance with the criteria listed in Table B-2.1 and must be supported by an approved EDR, as applicable, or MSC or HQUSACE CECW-P approved LRR or GRR, as applicable, which specifically addresses the work recommended for construction.

**B-2.7. Adjustments to PY-1 Programs.** When Congress takes action on the PY-1 appropriations bill, appropriate revisions to Division submissions will be requested.

**B-2.8. Cost Estimates and Inflation Factors.** Cost estimates for all construction projects and separable elements will be based on a 1 October of the PY-1 price level with an allowance for inflation through the construction period assuming an efficient rate of construction.

a. Project Cost Estimates, PB-3s, for projects which are recommended for funding in the PY should be updated to a 1 October of the PY-1 price level in accordance with the instructions in ER 11-2-240. Separable elements must be shown individually on the PB-3s. Federal and non-Federal cost sharing must reflect the guidance in this subappendix. The cost estimates for new start construction projects, new recreation area modernization projects, new major rehabilitation projects (including seepage or stability correction projects), new dam safety assurance projects, new deficiency correction projects, new reconstruction projects, new dredged material disposal facility projects, resumptions, new reimbursement projects, unstarted projects, and unstarted separable elements must be complete and reliable to assure credibility with the project sponsor, the Administration, and the Congress.

b. Inflation factors for the period PY through PY+9 which must be used for updating cost estimates to include future inflation for the PY submission to CECW-B are shown on Table 1 of the EC. These factors must be used to escalate future costs for consultants, A-E contractors, GM/GS employees, wage board employees, construction, and operation and maintenance activities through the construction period for each project. The PY+9 inflation factors, compounded as appropriate, must be used for that portion of the construction period beyond PY+9 to project completion. Instructions for escalating estimates beyond PY+9 are provided at the bottom of Table 1.

c. Effective 1 October 1985, funds obligated for continuation of planning and engineering studies (CP&E) are considered project costs and must be included in project cost estimates. However, CP&E funds obligated prior to 1 October 1985 remain excluded from project cost estimates. Funds allocated for CP&E, which are obligated on or after 1 October 1985, and all advance engineering and design (AE&D)

and preconstruction engineering and design (PED) funds shall be made a part of the cost allocation to project purposes and the cost apportionment between Federal and non-Federal shares.

d. Items which are indefinite or unprogrammed will be based on a 1 October of the PY-1 price level without an allowance for future inflation and their costs will be included in the unprogrammed balance to complete for each project. Indefinite or unprogrammed items include parts of projects that will very likely not be programmed due to lack of local support or other non-funding reasons, unstarted separable elements which have a benefit-cost ratio less than 1.0 at the current discount rate excluding recreation benefits and costs, and some physically unstarted projects or separable elements which are not presently ready for initiation of construction and which require further design. Many items in the unprogrammed balance to complete, although currently designated as active, may eventually be deauthorized or reclassified to the deferred or inactive categories, and all items must reflect the cost sharing and financing concepts in the Water Resources Development Acts Of 1986, as amended, and 1996. Some indefinite or unprogrammed items may proceed to construction at a future date, at which time they would be included in the programmed portion of the applicable project.

e. Contracts for programmed work and other associated activities such as land acquisition, planning, engineering and design, and construction management will be inflated through the construction period for each project to project completion.

f. Cost estimates and program requests will include future pay raises for GM/GS and wage board employees through the construction period to project completion. Adjustments will be made by CECW-B to reflect, if necessary, Administration assumptions regarding absorption of the raises.

g. To estimate the inflation allowance for construction projects to be included in the PY submission to CECW-B, and for other projects where appropriate, use the methodology provided below and the schedule developed for each project at the Baseline Level. The inflation allowance for each project will be computed only once and will be used without recomputation for all funding level schedules. The Non-Federal costs for these projects will be escalated to include an inflation allowance for future years in the same manner as Federal costs.

h. Instructions for escalating project cost estimates to include an allowance for future inflation are provided below.

(1) Develop a Baseline Level schedule for each project at a 1 October of the PY-1 price level.

(2) Do not further escalate contracts already awarded or to be awarded by 30 September of the PY-2.

(3) Escalate each contract to be awarded in the PY-1 and future years through its construction period in accordance with the guidance in Table 1.

(4) Escalate land acquisition, in-house planning, engineering and design costs, in-house construction management costs, and Non-Federal costs through the construction period also in accordance with the guidance in Table 1.

#### **B-2.9. Schedules, Completion Dates, Contingencies and Funding Levels.**

a. A Detailed Project Schedule, PB-2a, will be prepared using PRISM for each project for the Baseline Level based on the assumptions noted above in accordance with the PRISM Users Manual. However, the automated PB-2a/PBS link will not be activated. Therefore, the Baseline Level funding

amounts from the PB-2a may be input into PBS by PRISM or may be manually input into PBS for Illustration B-2.1, Project Data Summary.

b. A completion date for each project will be developed for the Baseline Level. If the completion date for the entire project is indefinite, then the completion date for the currently programmed construction work will be used. If planning, engineering and design is the only programmed activity and all construction work is unprogrammed, then the completion date will be shown as indefinite. For projects which include beach nourishment, show separate completion dates for initial construction and periodic nourishment.

c. After the Baseline Level is developed using PRISM, Districts/Divisions will also develop a Capability Level, defined below, for each project by inputting data directly into PBS for Illustration B-2.1, Project Data Summary, prior to submission of all information to CECW-B. **The Capability Level funding for each fiscal year, including inflation allowances, should reflect the amounts that can realistically be expended during the 10-year period, PY through PY+9, based on in-house technical capability and a realistic financing capability on the part of the non-Federal project sponsors. It is extremely important that Districts and Divisions carefully consider Capability Level amounts, and not merely copy the Baseline Level amounts into the Capability Level unless the Baseline Level amounts actually reflect their Capability Level efforts. The ten year program recommendations to OMB and reallocations of PY through PY+9 ceiling amounts will be derived from the Capability Level. Districts and Divisions that merely copy the Baseline Level amounts into the Capability Level for convenience and ease of entry will be shortchanged in the ceiling allocation process.**

d. Savings and slippage reductions and assumed work allowances for the PY-1 construction program, as discussed above, must be reflected in the PB-2a's which are submitted to CECW-B using PRISM.

e. The cost estimate for each project, subproject, or separable element of a project must include a separate item for contingencies as an allowance against some adverse or unanticipated condition not susceptible to exact evaluation from available data. Contingencies will be displayed under a separate feature using feature code 59. Separate line-items and descriptions may be used, if desired, under feature 59 to specifically display the contingencies associated with the work shown under features 01 through 31. The contingency allowance should be varied according to the stage of planning and design after considering the sufficiency of the data which form the basis of each quantity estimate. ER 1110-2-1302, appendix D, shows reasonable percentage factors to be used for contingency allowances in estimates of costs for construction and relocation features. For projects that are not programmed to complete in the PY, the project cost estimate may include appropriate contingency allowances. However, the PY request must not include an amount for contingencies and such allowances must be distributed in the outyears in proportion to the work to which the contingencies apply. Contingencies may only be included in the programmed or unprogrammed balance to complete in proportion to the work included therein. For projects that are programmed to complete in the PY, the PY request may include an appropriate, reasonable amount for contingencies. As a project nears completion, the contingency allowance must be reduced accordingly. **In no case will contingencies for completed work be included in the programmed or unprogrammed balance to complete subsequent to programmed project completion in the PY through PY+9.** Claim settlements and deficiency judgements in the PY through PY+9 will be handled in accordance with normal reprogramming procedures. PY through PY+9 requests must not include amounts for anticipated claim settlements or anticipated deficiency judgements.

f. Optimum funding schedules for continuing projects and separable elements included in the President's program far exceed the available ceilings for each fiscal year. This is true notwithstanding any proposed policy changes. Therefore, optimum project schedules must be fundamentally revised to accommodate the allocated ceilings. This will extend project completion dates far beyond their optimum

schedules and may require undesirable contract sequencing, such as scheduling contracts on a no-gap basis or even including periods where no work is underway. We realize that delays due to constrained program ceilings will be a primary cause of extended project completion dates. **When project schedules are revised to accommodate the allocated ceilings, individual contracts, including associated contingencies, must be continuous. Contracts must not show lapses in earnings or show contingencies in the programmed or unprogrammed balances to complete separately from other portions of the contract. If large contracts cannot be accommodated within the allocated ceilings, they must be broken up into discrete pieces. Furthermore, contracts must not be awarded in such a manner that they create future funding requirements that cannot be accommodated within the allocated ceilings. Above all, programmed projects and separable elements must be treated consistently, and specific projects should not be singled out for accelerated funding nor should they be unduly delayed. Project managers must be involved in developing the revised project schedules. They have a crucial role to play in complying with the constrained funding ceilings and must be deeply involved in finding the least damaging ways to reduce funding requirements.**

g. Funding level definitions are provided below.

(1) **Baseline Level.**

(a) The Baseline Level includes funds to maintain, insofar as possible, the completion dates for all continuing construction projects based on the Administration's PY-1 program. The Baseline Level should reflect the funding decisions shown on the PY-1 Congressional Detailed Project Schedules (PB-2a's); that is, earnings for new or unawarded contracts should not be accelerated and earnings for ongoing contracts should reflect actual progress. However, contracts for unprogrammed separable elements which were not programmed in the PY-1 program may be programmed in the PY or outyears as otherwise appropriate. Also, new start construction projects, new major rehabilitation projects (including continuing seepage or stability correction projects), dam safety projects not previously budgeted, new deficiency correction projects, new reconstruction projects, dredged material disposal facility projects not previously budgeted, new reimbursement projects, resumptions, unstarted projects, unstarted separable elements, and periodic beach nourishment projects not included in the PY-1 program will be included in this level.

(b) To assure consideration of the OMB funding ceilings for CG, including IWTF, ~~HSF~~ HMTF, and MR&T, and minimize revision of field input after submission to CECW-B, Baseline Level ceiling amounts for PY through PY+9 for items covered by this subappendix have been assigned to Divisions as shown on Table B-2.3. These ceilings reflect the OMB PY ceilings for CG, including IWTF, ~~HSF~~ HMTF, and MR&T appropriations. Each Division's total Baseline Level amount for CG, IWTF, and ~~HSF~~ HMTF **continuing** projects must not exceed its assigned ceiling for the PY through PY+9. Ceiling amounts may not be shifted to subsequent fiscal years to reflect schedule slippages. CECW-B may adjust assigned ceiling amounts subsequent to the initial program submission to reflect Congressional action on the PY-1 appropriations or other special circumstances. Nevertheless, each Division's initial Baseline Level program submission must not exceed its assigned PY through PY+9 ceilings for continuing projects. The CG, IWTF, and ~~HSF~~ HMTF ceiling amounts **include** all PY continuing items covered by subappendix B-2 which were programmed in PY-1 (i. e. PY-1 continuing construction projects, major rehabilitation projects, dam safety assurance projects, deficiency correction projects, reconstruction projects, dredged material disposal facility projects, reimbursement projects, resumptions, unstarted projects, unstarted separable elements). The applicable ceiling amounts assigned to designated high priority projects included in the President's PY-1 program must not be diverted to other continuing projects. If the ceiling cannot be used on a designated high priority project, the excess amount must be reported to CECW-BE so that it can be reallocated to meet Corps wide needs. The CG, and IWTF ceiling amounts **exclude** continuing construction projects, or portions thereof, excluded from the President's PY-1 program by OMB, and all PY through PY+9 new starts, including new start construction projects, new major rehabilitation projects,



new dam safety assurance projects, new deficiency correction projects, new reconstruction projects, new reimbursement projects, new dredged material disposal facility projects, resumptions, unstarted projects, ~~and~~ unstarted separable elements, and periodic beach nourishment projects not included in the PY-1 program. Division CG total Baseline Level program amounts may exceed their CG and IWTF ceilings by the amount for new start activities and continuing projects, or portions thereof, excluded from the President's PY-1 program by OMB. We will adjust each Division's total CG and IWTF ceiling amount after selections are completed for new start and continuing items to be included in the PY submission to OMB and Congress. For MR&T, the ceilings include both new starts and PY continuing items.

(2) **Decrement Level.** A Decrement Level input will not be required with the initial program submission.

(3) **Capability Level.** In addition to the activities in the Baseline Level, the Capability Level includes funds to advance the construction schedule of a project by advancing the completion of a useful increment of work to provide earlier realization of benefits or by advancing completion of the entire project. **The Capability Level funding for each fiscal year, including inflation allowances, should reflect the amounts that can realistically be expended during the 10-year period, PY through PY+9, based on in-house technical capability and a realistic financing capability on the part of the non-Federal project sponsors. It is extremely important that Districts and Divisions carefully consider Capability Level amounts, and not merely copy the Baseline Level amounts into the Capability Level unless the Baseline Level amounts actually reflect their Capability Level efforts. The ten year program recommendations to OMB and reallocations of PY through PY+9 ceiling amounts will be derived from the Capability Level. Districts and Divisions that merely copy the Baseline Level amounts into the Capability Level for convenience and ease of entry will be shortchanged in the ceiling allocation process.**

**B-2.10. Recreation Facilities.** In accordance with the current policy on Federal funding of recreation facilities at projects under construction, additional recreation facilities will not be programmed, except for minimum facilities needed for health and safety as defined in ER 1165-2-400, unless local interests agree to provide 50 percent cost sharing and financing for their share of recreation costs and to bear 100 percent of the recreation operation and maintenance costs in accordance with the cost sharing and financing concepts in the Water Resources Development Act of 1986, as amended,.

a. For projects where local interests have definitely declined to provide Non-Federal cost sharing, or where there is not yet a cost sharing agreement for whatever reason, include minimum facilities for health and safety in the project schedules, as appropriate, and include remaining recreation facilities in the unprogrammed balance to complete beyond PY+9. However, recreation development previously approved by ASA(CW) at 100 percent Federal cost may be completed.

b. For continuing construction projects with recreation facilities previously included in the unprogrammed balance to complete for which non-Federal interests have expressed a desire to construct all or a portion of the unprogrammed facilities, construction of such recreation facilities will be considered a PY new investment decision and will be included on Illustration B-2.6, PY Proposed New Major Rehabilitation and Other New Work Summary. Furthermore, such work must be submitted to HQUSACE CECW-B as a new start separable element for PY construction funding even though the proposed recreation facilities may be included in an executed PCA or section 221 agreement.

c. For continuing construction projects with recreation facilities which are not included in an executed PCA or section 221 agreement, construction of such recreation facilities will be considered a PY new investment decision and will be included on Illustration B-2.6, PY Proposed New Major Rehabilitation and

Other New Work Summary. Furthermore, such work must be submitted to HQUSACE CECW-B as a new start separable element for PY construction funding.

d. For new start construction projects or unstarted separable elements, construction of recreation facilities will be considered together with the primary portion of the project or separable element as a PY new investment decision and will be included on Illustration B-2.7, New Start Construction Checklist.

#### **B-2.11. Cost Sharing.**

a. For navigation projects, section 101 (a).(1). of the Water Resources Development Act Of 1986, as amended,, as amended, and section 201 of the Water Resources Development Act of 1996 specifies that the cost sharing and financing provisions reflected in the Act shall apply to any project, or separable element thereof, on which a contract for physical construction has not been awarded before the date of enactment of the Act, 17 November 1986.

b. For flood control and other projects, section 103.(e).(1). of the Water Resources Development Act of 1986, as amended, specifies that the cost sharing and financing provisions of the act shall apply to any project, or separable element thereof, on which physical construction is initiated after 30 April 1986, except for specific projects exempted from this provision as noted in the Act. Section 202 (a) of the Water Resources Development Act of 1996 specifies that the non-Federal share of project costs assigned to flood control shall be 35 percent for any project authorized after the date of enactment of the Act, 12 October 1996.

c. For new deficiency correction projects at non-Federally operated and maintained projects, cost sharing and financing will reflect the concepts of the Water Resources Development Acts Of 1986, as amended, and 1996 unless an exception is granted by ASA(CW) during the reconnaissance report review and approval process. However, these projects will reflect the cost sharing and financing concepts in the Water Resources Development Acts of 1986, as amended, and 1996 until excepted from such cost sharing by ASA(CW). For new deficiency correction projects at Corps of Engineers operated and maintained projects, there will be no cost sharing required unless a non-Federal sponsor has contributed toward the initial construction of the project. Payment may be required of public entities which have signed agreements with the Government, e.g. for water supply storage.

d. For dam safety assurance projects that have not been previously programmed for construction, cost sharing and financing will reflect a non-Federal cash contribution allocated to project purposes in accordance with Section 1203.(a) of the Water Resources Development Act Of 1986, as amended,.

e. For new reconstruction projects, cost sharing and financing will reflect the concepts of the Water Resources Development Acts Of 1986, as amended, and 1996.

f. For resumptions, cost sharing and financing will depend on the circumstances under which construction on the project was stopped. Generally, if it was at the request of, or due to action by local interests, cost sharing and financing concepts reflected in the Water Resources Development Acts Of 1986, as amended, and 1996 will apply. However, if the project was stopped by other parties, such as in the case of a court injunction, then the originally authorized cost sharing and financing requirements will be applicable.

g. Projects and separable elements for which construction was ongoing with respect to applicable portions of the Water Resources Development Act Of 1986, as amended, are not affected by the cost sharing provisions of the Water Resources Development Acts Of 1986, as amended, and 1996.

~~h. New preconstruction engineering and design type activities funded under the CG account either by inclusion in the PY program or by Congressional add will be subject to concurrent non-Federal financing of 25 percent of the cost of these efforts. Adjustments to reflect project cost allocations in the PCA for each project will be made during the first year of construction to ensure that the overall cost sharing for each project is consistent with applicable law.~~

~~i. New feasibility report or GRR type activities funded under the CG account either by inclusion in the PY program or by Congressional add will be subject to concurrent non-Federal financing of 50 percent of the cost of these efforts. Adjustments to reflect project cost allocations in the PCA for each project will be made during the first year of construction to ensure that the overall cost sharing for each project is consistent with applicable law.~~

h. New GRR or PED type activities funded under the CG account either by inclusion in the PY program or by Congressional add will be subject to concurrent non-Federal financing of the cost of these efforts. This non-Federal financing requirement may be met through: (1) a design agreement if a PCA has not yet been executed for the project or separable element to which the new work pertains; (2) a previously executed PCA for the project or separable element; or (3) a design agreement if the executed agreement for the project or separable element does not include a provision for concurrent financing of the non-Federal share of project costs. These GRR or PED type activities will be included in the total project cost estimate and fund allocations for the overall project or separable element and will ultimately be cost shared at the rate for the construction project or separable element to which they apply.

~~j. i.~~ Since Federal funds are limited, it is especially important that financial obligations for construction in each fiscal year include the appropriate non-Federal cash share. For each project, non-Federal required cash contributions and Federal funds should be obligated such that the sponsor's percentage cash share of financial obligations for construction in each fiscal year is equal to the sponsor's overall percentage cash share of total financial obligations for construction. The exception is in the first fiscal year of construction, when the sponsor's required cash contributions should be higher than this proportion because it will include the non-Federal share of sunk PED and engineering and design costs, other than non-Federal contributions already made, if any. Credit for authorized and approved construction by the sponsor, if any, should be included in financial obligations for construction and applied toward the sponsor's required cash contribution (other than the 5 percent cash share required for structural flood control) in the year that the credit for the completed work is afforded. In all cases the schedule for obligating and expending non-Federal funds is independent of the schedule for the provision or crediting of LERRDs. Failure to obtain, obligate, and expend non-Federal cash contributions in the proper proportion results in the improper, excessive obligation and expenditure of Federal funds and the unnecessary delay of projects whose schedules are constrained by the availability of Federal funds.

**B-2.12. Remaining Benefit-Remaining Cost Ratio (RBRCR).** Use the following guidelines to compute the RBRCR at the applicable interest rate and current interest rate for Illustration B-2.1, Project Data Summary.

a. Consider anticipated Federal and non-Federal allocations and other non-Federal costs through the PY-1 as sunk, and exclude them from the RBRCR computation. The amortization and interest portion of the annual charges will be computed on the remaining first costs and the interest during construction for the remainder of the construction period. Include total project operation and maintenance costs and benefits, unless the project is in a category described below.

b. Where the project includes completed independent units or useful increments, the realized annual benefits will also be excluded from the RBRCR computation, along with the sunk costs. In this case, sunk costs include operation and maintenance costs as well as capital costs of the completed independent

units or increments. For beach erosion control projects where the initial fill has been completed and only periodic nourishment remains to be accomplished, indicate the RBRCR is not applicable because initial construction has been completed. For uncompleted reservoir projects that are not formally operational, i. e., a permanent pool has not been impounded, flood control benefits from work in place may be treated as incidental benefits and included in the RBRCR computation.

c. The RBRCR supporting PY funding requests for the early stages of planning, engineering and design for unstarted separable elements, resumptions, and unstarted projects when a current evaluation contained in an official report approved in or later than PY-5 is not available should be computed in the following manner: deflate the updated project cost to the price level of the latest approved detailed economic evaluation, deflate the expended project costs to the price level of the latest approved evaluation, reduce the deflated project cost estimate by the deflated expended costs, annualize the remaining project costs at the required discount rates, and divide the remaining annualized costs into the benefits which also must be annualized at the required discount rates. In no case should the benefits be price indexed except for specific benefit categories such as roads, bridges, and rail lines provided that these benefits do not constitute a major portion of overall benefits. The RBRCR should be reported with the price level and date of benefit evaluation noted (see sample explanation for Illustration B-2.4 in Basis for Benefit-Cost Ratio paragraph).

d. The RBRCR supporting PY funding requests for construction of unstarted separable elements, reimbursement projects, reconstruction projects, resumptions, and unstarted projects must be based on current approved evaluations of benefits and costs contained in an official report approved in or later than PY-5. Computation of the RBRCR should follow the instructions in paragraph B-2.12.c above. In no case should the benefits be price indexed except for specific benefit categories such as roads, bridges, and rail lines provided that these benefits do not constitute a major portion of overall benefits.

e. For projects that are complete for all practical purposes, or were authorized without a formal benefit-cost analysis, indicate the RBRCR is not applicable because the project is nearing completion or because monetary benefits have not been quantified, as appropriate.

**B-2.13. Supporting Data.** The following items must be prepared as indicated for each project for which funds are requested in the PY.

a. Detailed Project Schedule, PB-2a, will be prepared using PRISM for the Baseline Level for each project for which funds are requested in the PY. However, the automatic PB-2a to PBS copy feature will not be activated. The Baseline Level PB-2a must reflect the funding decisions for continuing projects shown on the PY-1 Congressional PB-2a and must display all active uncompleted separable elements. Note that the current PB-2a format shows a breakdown through PY+9. The PB-2a has also been modified to separately display Federal funds, Inland Waterways Trust Funds, Harbor ~~Services~~ Maintenance Trust Funds, non-Federal cash contributions and other costs, and Other Federal Agency funds in the method of financing tabulations. Contingencies will be displayed under a separate feature using feature code 59. Separate line-items and descriptions may be used, if desired, under feature 59 to specifically display the contingencies associated with the work shown under features 01 through 31.

b. Illustration B-2.1, Project Data Summary, will be prepared for each continuing project or separable element, each project or separable element expected to be recommended as a new construction start during the period PY through PY+9, and each programmed or unprogrammed separable element included in a Detailed Project Schedule, PB-2a, for a parent project proposed for funding in the PY, in accordance with instructions in the PRISM Users Manual. This includes new start construction projects, new recreation area modernization projects, new major rehabilitation projects, new dam safety projects, new deficiency correction projects, new reconstruction projects, new dredged material disposal facility projects,

new reimbursement projects, resumptions, unstarted projects, and unstarted separable elements. Individual Illustrations B-2.1 prepared for programmed and unprogrammed separable elements will be rolled up into their parent projects by PRISM. A separate data field has been established to show remaining PED costs on each Illustration B-2.1 for PY+1 through PY+9 new construction start projects or separable elements so that PED costs will not be included with construction costs in the 10 year construction program. The Baseline Level funding amounts from the PB-2a may be input into PBS by PRISM or may be manually input into PBS since the automatic PB-2a to PBS copy feature will not be activated,. The Capability Level funding amounts will be directly entered into PBS by the field. Illustrations B-2.2A, B-2.2B, B-2.2C, B-2.2D, and B-2.3 provide summaries of Federal (Corps) funding requirements, Inland Waterways Trust Fund requirements, Harbor ~~Maintenance Trust~~ Services Fund requirements, Other Federal Agency funding requirements, Non-Federal cash contributions and other costs, and completions, respectively, from data developed for each Illustration B-2.1. **The Capability Level funding for each fiscal year, including inflation allowances, should reflect the amounts that can realistically be expended during the 10-year period, PY through PY+9, based on in-house technical capability and a realistic financing capability on the part of the non-Federal project sponsors.**

c. Illustration B-2.4, PY Justification Sheet, will be prepared for the Baseline Level for each new start construction project, new recreation area modernization project, new major rehabilitation project, new dam safety assurance, new deficiency correction project, new reconstruction project, new dredged material disposal facility project, new reimbursement project, resumption, and unstarted project which is recommended for funding in the PY. Furthermore, a justification sheet will be prepared for each continuing dam safety project, major rehabilitation seepage or stability correction project, or dredged material disposal facility project that has not been previously included in the PY-1 President's budget. In addition, although funds for separable elements of ongoing construction projects are not programmed on an individual basis and are included as part of the program requests for their parent projects, Illustration B-2.4, PY Justification Sheet, will be prepared for each unstarted separable element which is recommended for funding for construction in the PY. The justification sheets must be typed on standard size paper, 8 1/2 inches by 11 inches, as left justified Word97 or earlier version documents at 6 lines per inch (.167 inch line height) using a landscape 10 point font (12 characters per inch); Courier or Arial are the preferred typefaces. The typed material must be confined to 6 1/2 inches vertically and 10 inches horizontally, leaving 1/2 inch margins on the left and right sides, and 1 inch margins on the top and bottom. The June submission must be submitted by email as a Word97 or earlier version document. See paragraph 11.b.(2).(a). of the main EC for specific instructions concerning conversion of your justification sheets to an Adobe Acrobat 4.0 file for transmission of the Congressional submission to HQ. The appropriation title and project classification must be typed as the first line in the body and the Division, District, and project name must be typed in the 1 inch bottom margin. Do not underline any headings. Illustrations B-2.4 for continuing projects will be requested at a later date for the PY submission to Congress.

d. Illustration B-2.6, PY Proposed New Major Rehabilitation and Other New Work Summary, will be prepared to identify each new major rehabilitation project, new recreation area modernization project, new deficiency correction project, new reconstruction project, resumption, unstarted project, and unstarted separable element of an ongoing project recommended for construction funding in the PY in either the baseline or capability levels. In addition, for continuing construction projects with recreation facilities included in the unprogrammed balance to complete for which non-Federal interests have expressed a desire to construct all or a portion of the unprogrammed facilities, construction of such recreation facilities will be considered a PY new investment decision and will be included on Illustration B-2.6 even though the proposed recreation facilities may be included in an executed PCA or section 221 agreement.

e. Illustration B-2.7, New Start Construction Checklist, will be prepared to identify PY new start construction projects that are recommended in either the baseline or capability levels in accordance with the criteria listed in Table B-2.1.

f. You should be prepared to submit three copies of the document confirming compliance with preliminary selection criterion number 3 of Table B-2.1 for all recommended new start candidates. If the recommended plan materially differs either in scope or costs (20 percent, adjusted) from the authorized plan, or from that included in the report being processed for submission to Congress, three copies of the reevaluation report justifying such deviation will be required. If copies of required reports have been sent for previous program submissions, CECW-B will verify the availability of these reports before requesting additional copies.

g. A reproducible map will be provided for each new start construction project, new major rehabilitation project, new recreation area modernization project, new deficiency correction project, new reconstruction project, new reimbursement project, resumption, unstarted project, and unstarted separable element of an ongoing project recommended for funding for construction in the PY. Furthermore, a map will be provided for each continuing dam safety project, major rehabilitation seepage or stability correction project, or dredged material disposal facility project that has not been previously included in the PY-1 President's budget. For the June submission, a copy of a location or project map from a feasibility report, design memorandum, or other document will be sufficient. The June submission map must be marked in black reproducible pencil to clearly show the project and separable elements thereof, if applicable, in relation to nearby geographical features. The purpose of the map is to aid in understanding the nature of the project or separable element. See paragraph 11.b.(2).(a). of the main EC for specific instructions concerning conversion of your maps to an Adobe Acrobat 4.0 file for transmission of the Congressional submission to HQ.

#### **B-2.14. Coding Instructions.**

a. An automated database will be developed for the construction program using the PBS module of PRISM. Coding instructions have been provided in the PRISM Users Manual. A PB-2a will be prepared using PRISM for the Baseline Level for each project recommended for funding in the PY. However, the automatic PB-2a to PBS copy feature will not be activated. Therefore, the Baseline Level funding amounts from the PB-2a may be input into PBS by PRISM or may be manually input into PBS for Illustration B-2.1, Project Data Summary. The Capability Level funding amounts will be directly entered into PBS by the field for Illustration B-2.1.

b. Illustration B-2.1, Project Data Summary, Illustration B-2.2A, Federal (Corps) Funding Requirements Summary, Illustration B-2.2B, Inland Waterways Trust Fund Requirements Summary, Illustration B-2.2C, Other Federal Agency Funding Summary, Illustration B-2.2D, Non-Federal Cash Contributions and Other Costs Summary, Illustration B-2.2E, Harbor ~~Services Fund~~ Maintenance Trust Fund Requirements Summary, and Illustration B-2.3, Completions Summary, may be extracted from the PBS database.

**B-2.15. Submission Requirements.** Copies of the following items must be submitted to HQUSACE CECW-BE, C, or W, as applicable, WASH DC 20314-1000, except as noted, by the date and in the amount indicated below.

a. Baseline Level PB-2a prepared using PRISM for each project for which funds are requested in the PY, database will close 30 June, ADP output, no hardcopy submission required.

- b. Illustration B-2.1, Project Data Summary Table, for each continuing project or separable element, each project or separable element expected to be recommended as a new construction start during the period PY through PY+9, and each programmed or unprogrammed separable element included in a Detailed Project Schedule, PB-2a, for a parent project proposed for funding in the PY. This includes new start construction projects, new recreation area modernization projects, new major rehabilitation projects, new dam safety assurance projects, new deficiency correction projects, new reconstruction projects, new dredged material disposal facility projects, new reimbursement projects, resumptions, unstarted projects, and unstarted separable elements. For the Baseline Level, Individual Illustrations B-2.1 prepared for programmed and unprogrammed separable elements will be rolled up into their parent projects by PRISM. Database will close 30 June, ADP output, no hard copy submission required.
- c. Illustration B-2.2A, Federal (Corps) Funding Requirements Summary, database will close 30 June, ADP output, no hard copy submission required. This is a summary of all Illustrations B-2.1.
- d. Illustration B-2.2B, Inland Waterways Trust Fund Requirements Summary, database will close 30 June, ADP output, no hard copy submission required. This is a summary of all Illustrations B-2.1.
- e. Illustration B-2.2C, Other Federal Agency Funding Summary, database will close 30 June, ADP output, no hard copy submission required. This is summary of all Illustrations B-2.1.
- f. Illustration B-2.2D, Non-Federal Cash Contributions and Other Costs Summary, database will close 30 June, ADP output, no hard copy submission required. This is a summary of all Illustrations B-2.1.
- g. Illustration B-2.2.E, Harbor ~~Maintenance Trust~~ Services Fund Requirements Summary, database will close 30 June, ADP output, no hard copy submission required. This is a summary of all Illustrations B-2.1.
- h. Illustration B-2.3, Completions Summary, database will close 30 June, ADP output, no hardcopy submission required. This is a summary of all Illustrations B-2.1.
- i. Illustration B-2.4, PY Justification Sheet, for the Baseline Level for each new start construction project, new recreation area modernization project, new major rehabilitation project, new dam safety assurance project, new deficiency correction project, new reconstruction project, new dredged material disposal facility project, new reimbursement project, resumption, unstarted project, and unstarted separable element of an ongoing project recommended for construction funding in the PY, 1 June, no hardcopy required. Furthermore, a justification sheet will be prepared for each continuing dam safety project, major rehabilitation seepage or stability correction project, or dredged material disposal facility project that has not been previously included in the PY-1 President's budget. The June submission must be submitted by email as a Word97 or earlier version document. See paragraph 11.b.(2).(a). of the main EC for specific instructions concerning conversion of your justification sheets to an Adobe Acrobat 4.0 file for transmission of the Congressional submission to HQ.
- j. Illustration B-2.6, PY Proposed New Major Rehabilitation and Other New Work Summary. Each new major rehabilitation project, new recreation area modernization project, new dam safety assurance project, new deficiency correction project, new reconstruction project, new dredged material disposal facility project, resumption, unstarted project, unstarted separable element of an ongoing project, and additional recreation facility recommended for construction funding in the PY must be listed, 1 June, 3 copies.

k. Illustration B-2.7, New Start Construction Checklist, to identify PY new start construction projects that are recommended in accordance with the criteria listed in Table B-2.2, 1 June, 10 copies.

l. Feasibility Report with Engineering Appendix, EDR, and/or LRR or GRR for each new start construction project recommended for construction funding in the PY, when requested, 3 copies.

m. A reproducible map on 8 1/2 inch by 11 inch paper for each new start construction project, new major rehabilitation project, new recreation area modernization project, new dam safety assurance project, new deficiency correction project, new reconstruction project, new dredged material disposal facility project, new reimbursement project, resumption, unstarted project, and unstarted separable element of an ongoing project recommended for construction funding in the PY, 1 June, 10 copies. Furthermore, a map will be provided for each continuing dam safety project, major rehabilitation seepage or stability correction project, or dredged material disposal facility project that has not been previously included in the PY-1 President's budget. Larger folded maps are no longer acceptable. See paragraph 11.b.(2).(a). of the main EC for specific instructions concerning conversion of your maps to an Adobe Acrobat 4.0 file for transmission of the Congressional submission to HQ.

n. Evaluation or reconnaissance report, as applicable, for each new major rehabilitation project new dam safety assurance project, new deficiency correction project, and new dredged material disposal facility project recommended for construction funding in the PY, including submission letter and subsequent forwarding and approval endorsements; 15 March for new major rehabilitation projects, 3 copies to HQUSACE CECW-AR; 1 June for new dam safety assurance projects, new deficiency correction projects, and new dredged material disposal facility projects, 3 copies to HQUSACE CECW-AR, CECW-E, and CECW-O, respectively. In addition, an appropriate report must be approved by HQUSACE CECW-O and ASA(CW), as applicable, or at HQUSACE CECW-O for approval, as applicable, by 1 June of the PY-2 with HQUSACE CECW-O and ASA(CW) approval, as applicable, expected by 1 August of the PY-2 to be considered for inclusion in the PY program as a continuing project.

o. EDR or reevaluation report for each unstarted separable element, resumption, or unstarted project recommended for construction funding in the PY, including submission letter and subsequent forwarding and approval endorsements, 1 June, 3 copies.

p. Approved M-CACES baseline cost estimate (summary sheets to the subfeature element level for each feature and the appropriate narrative) for each new start construction project, new major rehabilitation project (except seepage or stability correction projects), new dam safety assurance project, new deficiency correction project, new reconstruction project, new dredged material disposal facility project, new reimbursement project, resumption, unstarted project, and unstarted separable element recommended for construction funding in the PY, 1 June, 1 copy.



TABLE B-2.1  
NEW STARTS: CONSTRUCTION  
(INCLUDING SEPARABLE ELEMENTS, RECONSTRUCTION PROJECTS,  
REIMBURSEMENT PROJECTS, RESUMPTIONS, AND UNSTARTED PROJECTS)

BASIC, PRELIMINARY SELECTION AND PRIORITIZATION CRITERIA

BASIC CRITERIA

1. The project is authorized for construction, or will complete PED prior to the PY.
2. The project has net NED benefits at the applicable discount rate or is responsive to mitigation, restoration, or protection of environmental resources.
3. PED is fully funded by the end of the PY-1 and the PCA is on schedule to be executed and the Financing Plan approved no later than the end of the PY.
4. The Project Manager has confirmed the sponsor's understanding of its contractual and financial commitments and its ability to meet the funding requirements of the construction schedule, including payback of its share of PED costs.
5. If the project has an unapproved report involving a significant change in project scope or cost or for addition of fish and wildlife mitigation measures, the required change(s) recommended in the report must be scheduled for Washington level review and approval by ASA(CW) as applicable, by 1 August of the PY-2.

PRELIMINARY SELECTION CRITERIA

1. Appropriate evaluation of project merits is contained in a Corps report and, in the case of a project the justification of which is based on NED benefits, the project has net NED benefits, at the current discount rate, based on firm benefits and an approved M-CACES baseline cost estimate.
2. The project is in compliance with the applicable environmental statutes, appropriate to the current stage of implementation.
3. The planning and policy review process for the recommended plan is scheduled for completion by ASA(CW) by 1 August of PY-2. For those projects where there are no substantial changes to the project plan presented in the feasibility report with an engineering appendix approved by ASA(CW) as applicable, the feasibility report will serve as the necessary document. For all other projects, an approved EDR, as applicable, or MSC or HQUSACE CECW-P approved GRR, as applicable, will be required in accordance CECW-A Policy Memorandum No. 2, 6 April 1995, subject: Civil Works Decision Document Review-Policy Compliance. If the economic analysis in the applicable document was approved earlier than PY-5, a LRR on the project economics will be required in accordance with paragraph 8 of the main part of the EC and paragraph B-2.3.a of this subappendix. The LRR may be approved by the MSC.
4. A M-CACES baseline cost estimate has been prepared, in accordance with ER 5-1-11, with approval at the appropriate level as the basis for the subsequent work and financial flow.

TABLE B-2.1 (Continued)  
NEW STARTS: CONSTRUCTION  
(INCLUDING SEPARABLE ELEMENTS, RESUMPTIONS, AND UNSTARTED PROJECTS)  
BASIC, PRELIMINARY SELECTION AND PRIORITIZATION CRITERIA

PRELIMINARY SELECTION CRITERIA (Continued)

5. A project management plan (PMP) has been prepared and approved.
6. If a postauthorization change is required, only routine issues are involved which will not require Congressional authorization.
7. No known or reasonably anticipated conditions or unresolved issues exist which might prevent either: (1) award of the first significant construction contract by the end of the PY; or (2) the start of real estate acquisition for the first significant construction contract so that the scheduled construction contract can be awarded no later than the end of the following fiscal year (PY+1) in the absence of the sponsor possessing title to the required lands and easements. Planning, engineering and design work should be far enough along in the PY so that the orderly and continuous progression of construction is assured with the scheduled award of the first construction contract.
8. An Environmental Assessment/Finding of No Significant Impact signed, or final EIS has been filed, or final EIS supplement is scheduled for filing with EPA by 1 August of the PY-2.

TABLE B-2.1 (Continued)  
NEW STARTS: CONSTRUCTION  
(INCLUDING SEPARABLE ELEMENTS, RESUMPTIONS, AND UNSTARTED PROJECTS)  
BASIC, PRELIMINARY SELECTION AND PRIORITIZATION CRITERIA

PRIORITIZATION CRITERIA

Projects Justified Based on NED Benefits						
Criteria to be Met	Project Priority					
	1	2	3	4	5	6
Economic Considerations						
BCR > 1.0 at current discount rate with separable recreation benefits and costs excluded.	X	X	X			
All other projects.				X	X	X
Environmental Considerations 1/						
With no adverse impact on environmental resources	X			X		
With justified mitigation fully offsetting losses to environmental resources.		X			X	
With justified mitigation not fully offsetting losses to environmental resources.			X			X

Projects to Mitigate, Restore, or Protect Environmental Resources

Resource Category 2/

Wetlands	X
Other ecological resources	X

Footnotes

1/ Can include activities for restoration or protection as added increments of work.

2/ Priority within each category will be based upon relative productivity using such measures as cost per unit of output, taking into consideration relative significance of output.

TABLE B-2.2  
APPLICABLE DISCOUNT RATES IN EFFECT  
WHEN INITIAL CONSTRUCTION FUNDS WERE APPROPRIATE

Fiscal Year	Discount Rate 1/ Show on Justification Sheet	Show on Illustration B-2.1
1958	2 1/2	2.500
1959	2 1/2	2.500
1960	2 1/2	2.500
1961	2 1/2	2.500
1962	2 5/8	2.625
1963	2 5/8	2.625
1964	2 7/8	2.875
1965	3	3.000
1966	3 1/8	3.125
1967	3 1/8	3.125
1968	3 1/8	3.125
1969	3 1/4	3.250
1970	3 1/4	3.250
1971	4 7/8	4.875
1972	5 1/8	5.125
1973	5 3/8	5.375
1974	5 1/2	5.500
1975	5 5/8	5.625
1976	5 7/8	5.875
1977	6 1/8	6.125
1978	6 3/8	6.375
1979	6 5/8	6.625
1980	6 7/8	6.875
1981	7 1/8	7.125
1982	7 3/8	7.375
1983	7 5/8	7.625
1984	7 7/8	7.875
1985	8 1/8	8.125
1986	8 3/8	8.375
1987	8 5/8	8.625
1988	8 7/8	8.875
1989	8 5/8	8.625

1/ Unless the project qualifies for the 3 1/4 percent rate under the "grandfather" clause in Section 80 of the 1974 Water Resources Development Act.

TABLE B-2.2 (Continued)  
APPLICABLE DISCOUNT RATES IN EFFECT  
WHEN INITIAL CONSTRUCTION FUNDS WERE APPROPRIATE

Fiscal Year	Discount Rate 1/ Show on Justification Sheet	Show on Illustration B-2.1
1990	8 5/8	8.625
1991	8 7/8	8.875
1992	8 7/8	8.875
1993	8 3/4	8.750
1994	8 1/2	8.500
1995	8 1/4	8.250
1996	8	8.000
1997	7 3/4	7.750
1998	7 5/8	7.625
1999	7 3/8	7.375
2000	7 1/8	7.125
2001	6 7/8	6.875
2002	6 5/8	6.625
<u>2003</u>	<u>6 3/8</u>	<u>6.375</u>

1/ Unless the project qualifies for the 3 1/4 percent rate under the "grandfather" clause in Section 80 of the 1974 Water Resources Development Act.

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TABLE B-2.3													
FY01 SAVINGS AND SLIPPAGE AND BASELINE LEVEL FY02 THROUGH FY11 PROGRAM CEILING AMOUNTS													
CONSTRUCTION, GENERAL, INLAND WATERWAYS TRUST FUND, HARBOR SERVICES FUND, AND FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES PROJECTS													
\$000													
	FY01	FY01	FY01										
	EST	EST	EST										
DIV	BUD	S&S	ALLOC	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
CONSTRUCTION, GENERAL, INLAND WATERWAYS TRUST FUND, AND HARBOR SERVICES FUND													
LR	206,916	-22,763	184,153	202,526	274,585	322,277	302,088	430,875	419,623	392,690	324,530	207,839	207,839
MV	221,056	-24,317	196,739	176,711	162,490	171,944	156,035	212,927	223,032	233,480	247,001	191,431	191,431
NA	190,977	-21,007	169,970	217,625	218,980	237,306	248,590	90,015	105,132	117,679	128,728	138,329	138,329
NW	177,198	-19,492	157,706	170,038	160,680	154,771	151,300	166,917	143,104	111,422	108,318	54,302	54,302
PO	16,437	-1,808	14,629	5,983	5,883	7,324	5,203	2,000	1,528	1,264	967	538	538
SA	304,825	-33,531	271,294	308,045	255,781	235,145	333,775	394,452	437,233	460,879	506,751	135,121	135,121
SP	112,447	-12,369	100,078	113,816	127,412	111,123	84,339	94,328	79,519	77,922	77,850	64,605	64,605
SW	131,967	-14,515	117,452	86,504	82,084	68,972	57,734	67,607	73,058	89,245	86,390	73,040	73,040
HQ	149,430	-15,451	133,979	214,758	227,689	244,906	244,940	166,880	186,770	227,416	276,463	315,084	315,084
TOTAL	1,511,253	-165,235	1,346,000	1,496,006	1,515,581	1,553,768	1,584,004	1,626,001	1,668,999	1,711,997	1,756,996	1,180,289	1,180,289
FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES													
MV	170,941	-7,192	163,749	180,700	179,741	186,004	211,843	212,840	213,932	229,074	239,148	227,659	239,674

TABLE B-2.3  
FY01 SAVINGS AND SLIPPAGE AND BASELINE LEVEL FY02 THROUGH FY11 CONTINUING PROGRAM CEILING AMOUNTS  
CONSTRUCTION, GENERAL, INLAND WATERWAYS TRUST FUND, HARBOR SERVICES FUND,  
AND FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES PROJECTS  
\$000

Each Division's total Baseline Level amount for CG, IWTF, and HSF ~~continuing~~ projects must not exceed its assigned ceiling for the PY through PY+4 and these ceiling amounts may not be shifted to subsequent fiscal years to reflect schedule slippages. Ceiling amounts for PY+5 through PY+9 may be exceeded to the extent required to compensate for PY-1 savings and slippage reductions and increases in project costs from PY-1. CECW-B may adjust assigned ceiling amounts subsequent to the initial program submission to reflect Congressional action on the PY-1 appropriations or other special circumstances. Nevertheless, each Division's initial program submission must not exceed its assigned PY through PY+4 ceilings for continuing projects.

The CG, IWTF, and HSF ceiling amounts ~~include~~ all PY continuing items covered by subappendix B-2 which were included in the President's PY-1 program, i.e. PY-1 continuing construction projects, major rehabilitation projects, dam safety assurance projects, deficiency correction projects, reconstruction projects, dredged material disposal facility projects, reimbursement projects, resumptions, unstarted projects, and unstarted separable elements. The applicable ceiling amounts assigned to designated high priority projects included in the President's PY-1 program must not be diverted to other continuing projects. If the ceiling cannot be used on a designated high priority project, the excess amount must be reported to CECW-BE so that it can be reallocated to meet Corps wide needs.

The CG and IWTF ceiling amounts ~~exclude~~ continuing construction projects, or portions thereof, excluded from the President's PY-1 program by OMB, all PY through PY+9 new starts, including new start construction projects, new major rehabilitation projects, new dam safety assurance projects, new deficiency correction projects, new reconstruction projects, new dredged material disposal facility projects new reimbursement projects, resumptions, unstarted projects, and unstarted separable elements, and periodic beach nourishment projects not included in the President's PY-1 program.

Division CG and IWTF total program amounts may exceed their CG and IWTF ceilings by the amount for new start activities and continuing projects, or portions thereof, excluded from the President's PY-1 program by OMB, and for and periodic beach nourishment projects not included in the President's PY-1 program. We will adjust each Division's total CG and IWTF ceiling amount after selections are completed for new start and continuing items to be included in the PY submission to OMB.

For MR&T, the ceilings include both new starts and PY-1 continuing items.

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TABLE B-2.3													
FY02 SAVINGS AND SLIPPAGE AND BASELINE LEVEL FY03 THROUGH FY12 PROGRAM CEILING AMOUNTS													
CONSTRUCTION, GENERAL, INLAND WATERWAYS TRUST FUND, HARBOR MAINTENANCE TRUST FUND, AND FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES PROJECTS													
\$000													
		FY02	FY02										
	FY02	EST	EST										
DIV	BUD	S&S	ALLOC	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
CONSTRUCTION, GENERAL, INLAND WATERWAYS TRUST FUND, AND HARBOR MAINTENANCE TRUST FUND													
LR	218,950	-23,155	195,795	280,000	329,000	375,000	417,000	439,000	409,000	351,000	273,000	360,000	371,000
MV	190,400	-20,136	170,264	167,000	166,000	172,000	192,000	223,000	247,000	310,000	361,000	327,000	337,000
NA	228,800	-24,197	204,603	202,000	217,000	213,000	193,000	187,000	189,000	188,000	218,000	558,000	575,000
NW	183,200	-19,374	163,826	200,000	184,000	168,000	160,000	158,000	163,000	176,000	165,000	2,000	2,000
PO	8,200	-867	7,333	13,000	20,000	20,000	15,000	0	0	0	0	0	0
SA	297,700	-31,435	266,215	233,000	238,000	251,000	258,000	276,000	309,000	338,000	401,000	213,000	219,000
SP	130,200	-13,769	116,431	170,000	161,000	149,000	146,000	124,000	111,000	103,000	92,000	68,000	70,000
SW	97,000	-10,353	87,547	108,000	92,000	90,000	91,000	95,000	103,000	94,000	73,000	0	0
HQ	125,230	-13,244	111,986	131,000	138,000	145,000	154,000	166,000	179,000	194,000	218,000	320,000	330,000
TOTAL	1,480,580	-165,235	1,324,000	1,504,000	1,545,000	1,583,000	1,626,000	1,668,000	1,710,000	1,754,000	1,801,000	1,848,000	1,904,000
FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES													
MV	140,542	-5,962	134,582	148,521	150,068	153,556	161,990	167,333	176,420	181,951	192,265	199,882	207,801



TABLE B-2.3  
FY01 SAVINGS AND SLIPPAGE AND BASELINE LEVEL FY02 THROUGH FY11 CONTINUING PROGRAM CEILING AMOUNTS  
CONSTRUCTION, GENERAL, INLAND WATERWAYS TRUST FUND, HARBOR SERVICES FUND,  
AND FLOOD CONTROL, MISSISSIPPI RIVER AND TRIBUTARIES PROJECTS  
\$000

Each Division's total Baseline Level amount for CG, IWTF, and HMTF **continuing** projects must not exceed its assigned ceiling for the PY through PY+4 and these ceiling amounts may not be shifted to subsequent fiscal years to reflect schedule slippages. Ceiling amounts for PY+5 through PY+9 may be exceeded to the extent required to compensate for PY-1 savings and slippage reductions and increases in project costs from PY-1. CECW-B may adjust assigned ceiling amounts subsequent to the initial program submission to reflect Congressional action on the PY-1 appropriations or other special circumstances. Nevertheless, each Division's initial program submission must not exceed its assigned PY through PY+4 ceilings for continuing projects.

The CG, IWTF, and HMTF ceiling amounts **include** all PY continuing items covered by subappendix B-2 which were included in the President's PY-1 program, i.e. PY-1 continuing construction projects, major rehabilitation projects, dam safety assurance projects, deficiency correction projects, reconstruction projects, dredged material disposal facility projects, reimbursement projects, resumptions, unstarted projects, and unstarted separable elements. The applicable ceiling amounts assigned to designated high priority projects included in the President's PY-1 program must not be diverted to other continuing projects. If the ceiling cannot be used on a designated high priority project, the excess amount must be reported to CECW-BE so that it can be reallocated to meet Corps wide needs.

The CG, IWTF, and HMTF ceiling amounts **exclude** continuing construction projects, or portions thereof, excluded from the President's PY-1 program by OMB, all PY through PY+9 new starts, including new start construction projects, new major rehabilitation projects, new dam safety assurance projects, new deficiency correction projects, new reconstruction projects, new dredged material disposal facility projects new reimbursement projects, resumptions, unstarted projects, and unstarted separable elements, and periodic beach nourishment projects not included in the President's PY-1 program.

Division CG, IWTF, and HMTF total program amounts may exceed their CG and IWTF ceilings by the amount for new start activities and continuing projects, or portions thereof, excluded from the President's PY-1 program by OMB, and for and periodic beach nourishment projects not included in the President's PY-1 program. We will adjust each Division's total CG and IWTF ceiling amount after selections are completed for new start and continuing items to be included in the PY submission to OMB.

For MR&T, the ceilings include both new starts and PY-1 continuing items.

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ILLUSTRATION B-2.1  
PROJECT DATA SUMMARY  
\$000

DIVISION/DISTRICT			PROJECT NAME		PWI NO		SS1		SS2							
EROC	APPROPRIATION		CAT/CLASS/SUBCLASS													
STATUS:	STATE	GROUP	GROUP2		FLOODPLAIN CAT											
-----BENEFIT/COST RATIO DATA-----																
APPL DISCOUNT RATE			TOTAL AVERAGE ANNUAL BENEFITS AT TIME OF NEW START													
RBR CR AT APPL RATE			TOTAL AVERAGE ANNUAL COST AT TIME OF NEW START													
RBR CR AT CURR RATE			TOTAL AVERAGE ANNUAL REMAINING BENEFITS													
			TOTAL AVERAGE ANNUAL REMAINING COST													
-----DATES-----   -----CONGRESSIONAL DISTRICTS-----																
FY AVAILABLE CONSTR																
FY NEW CONSTR START																
PROGRAMMED COMPLETION DATE																
LAST																
CURRENT																
-----CURRENT YEAR FUNDING-----																
PY-1 PROGRAM																
PY-1 CONFERENCE																
PY-1 ASSUMED S&S																
PY-1 GRH REDUCTION																
PY-1 OTHER ADJUST																
PY-1 PED ALLOCATION																
PROJECT		ALLOCATIONS		RMNG	FUNDING REQUIREMENTS											
COST EST		THRU	FOR	PED	PY	PY	PY	PY	PY	PY	PY	PY	PY	PY	BAL	TO COMP
FUNDING LEVEL	W/ INFL	PY-2	PY-1	BAL	PY	+1	+2	+3	+4	+5	+6	+7	+8	+9	PROG	UNPROG
BASELINE LEVEL																
FEDERAL (CORPS)																
FOR ILLUSTRATION PURPOSES ONLY																
INLAND WATERWAYS TRUST FUND (IWTF) (ADP output)																

ILLUSTRATION B-2.1 (CONTINUED)  
PROJECT DATA SUMMARY (\$000)

NON-FEDERAL

REQ CONTR

OTHER

TOTAL NON-FEDERAL

OTHER FEDERAL AGENCY (OFA)

TOTAL FEDERAL (CORPS), IWTF, NON-FEDERAL, AND OFA

DECREMENT LEVEL (A Decrement Level submission is not be required with the initial program request.)

FEDERAL (CORPS)

CAPABILITY LEVEL

FEDERAL (CORPS)

FOR ILLUSTRATION PURPOSES ONLY  
(ADP output)

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ILLUSTRATION B-2.2A  
FEDERAL (CORPS) FUNDING REQUIREMENTS SUMMARY - CONSTRUCTION  
\$000

DIVISION/DISTRICT			APPROPRIATION							FUNDING LEVEL													
TOTAL APPN	ALLOC THRU	PY-1 CONF	PY-1 S&S	PY-1 GRH	PY-1 OTHR	PY-1 WORK	RMNG PED	PY BAL	PY +1	PY +2	PY +3	PY +4	PY +5	PY +6	PY +7	PY +8	PY +9	BAL TO PROG	COMP UNPROG				
NAVIGATION																							
CHANNELS AND HARBORS																							
LOCKS AND DAMS																							
BEACH EROSION CONTROL																							
FLOOD CONTROL																							
LOCAL PROTECTION																							
RESERVOIRS																							
MULTIPLE PURPOSE POWER																							
MAJOR REHABILITATION																							
CHANNELS AND HARBORS																							
LOCKS AND DAMS																							
LOCAL PROTECTION																							
RESERVOIRS																							
MULTIPLE PURPOSE POWER																							
DAM SAFETY ASSURANCE																							
NAVIGATION																							
FLOOD CONTROL																							
MULTIPLE PURPOSE POWER																							
TOTAL																							

FOR ILLUSTRATION PURPOSES ONLY  
(ADP output summary)

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ILLUSTRATION B-2.2B  
INLAND WATERWAYS TRUST FUND REQUIREMENTS SUMMARY - CONSTRUCTION  
\$000

DIVISION/DISTRICT		APPROPRIATION						FUNDING LEVEL										
		TOTAL	ALLOC	PY-1		PY-1	PY-1	FUNDING REQUIREMENTS										
		APPN	THRU	CONF	PY-1	OTHR	WORK	PY	PY	PY	PY	PY	PY	PY	PY	PY	BAL	TO
ACTIV		REQT	PY-2	AMT	S&S	ADJUST	ALLOW	PY	+1	+2	+3	+4	+5	+6	+7	+8	+9	COMP
																	PROG	UNPROG
NAVIGATION																		
LOCKS AND DAMS																		
MAJOR REHABILITATION																		
LOCKS AND DAMS																		
TOTAL																		

FOR ILLUSTRATION PURPOSES ONLY  
(ADP output summary)

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ILLUSTRATION B-2.2C  
OTHER FEDERAL AGENCY FUNDING SUMMARY - CONSTRUCTION  
\$000

DIVISION/DISTRICT	APPROPRIATION							FUNDING LEVEL													
	TOTAL	ALLOC	PY-1		PY-1	PY-1		FUNDING REQUIREMENTS													
	APPN	THRU	CONF	PY-1	OTHR	WORK	PY	PY	PY	PY	PY	PY	PY	PY	PY	PY	BAL	TO	COMP		
ACTIV	REQT	PY-2	AMT	S&S	ADJUST	ALLOW	PY	+1	+2	+3	+4	+5	+6	+7	+8	+9	PROG	UNPROG			
NAVIGATION																					
FLOOD CONTROL																					
MULTIPLE PURPOSE POWER																					
TOTAL																					

FOR ILLUSTRATION PURPOSES ONLY  
(ADP output summary)

ILLUSTRATION B-2.2D  
NON-FEDERAL CASH CONTRIBUTIONS AND OTHER COSTS SUMMARY - CONSTRUCTION  
\$000

DIVISION/DISTRICT	APPROPRIATION					FUNDING LEVEL											
	TOTAL	ALLOC	RMNG		CONTRIBUTION REQUIREMENTS												
ACTIV	REQT	THRU PY-2	PY-1 ALLOC	PED BAL	PY	PY +1	PY +2	PY +3	PY +4	PY +5	PY +6	PY +7	PY +8	PY +9	BAL PROG	TO UNPROG	COMP
NAVIGATION																	
CHANNELS AND HARBORS																	
LOCKS AND DAMS																	
BEACH EROSION CONTROL																	
FLOOD CONTROL																	
LOCAL PROTECTION																	
RESERVOIRS																	
MULTIPLE PURPOSE POWER																	
MAJOR REHABILITATION																	
CHANNELS AND HARBORS																	
LOCKS AND DAMS																	
LOCAL PROTECTION																	
RESERVOIRS																	
MULTIPLE PURPOSE POWER																	
DAM SAFETY ASSURANCE																	
NAVIGATION FLOOD CONTROL																	
MULTIPLE PURPOSE POWER																	
TOTAL																	

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ILLUSTRATION B-2.2E  
HARBOR SERVICES FUND REQUIREMENTS SUMMARY - CONSTRUCTION  
\$000

DIVISION/DISTRICT	APPROPRIATION						FUNDING LEVEL													
	TOTAL	ALLOC	PY-1		PY-1	PY-1	FUNDING REQUIREMENTS													
	APPN	THRU	CONF	PY-1	OTHR	WORK	PY	PY	PY	PY	PY	PY	PY	PY	PY	PY	BAL	TO COMP		
ACTIV	REQT	PY-2	AMT	S&S	ADJUST	ALLOW	PY	+1	+2	+3	+4	+5	+6	+7	+8	+9	PROG	UNPROG		
NAVIGATION																				
CHANNELS AND HARBORS																				
MAJOR REHABILITATION																				
CHANNELS AND HARBORS																				
TOTAL																				

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ILLUSTRATION B-2.3  
COMPLETIONS SUMMARY - CONSTRUCTION

DIVISION/DISTRICT	APPROPRIATION										FUNDING LEVEL	
	PY	PY+1	PY+2	PY+3	PY+4	PY+5	PY+6	PY+7	PY+8	PY+9	BAL TO COMP PROG	UNPROG
ACTIV												
NAVIGATION												
CHANNELS AND HARBORS												
LOCKS AND DAMS												
BEACH EROSION CONTROL												
FLOOD CONTROL												
LOCAL PROTECTION												
RESERVOIRS												
MULTIPLE PURPOSE POWER												
MAJOR REHABILITATION												
CHANNELS AND HARBORS												
LOCKS AND DAMS												
LOCAL PROTECTION												
RESERVOIRS												
MULTIPLE PURPOSE POWER												
DAM SAFETY ASSURANCE												
NAVIGATION												
FLOOD CONTROL												
MULTIPLE PURPOSE POWER												
TOTAL												

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ILLUSTRATION B-2.4, PY JUSTIFICATION SHEET  
(NOTE: DO NOT TYPE ILLUSTRATION HEADING ON JUSTIFICATION SHEET)

APPROPRIATION TITLE: Construction, General - Enter the project classification and type.

PROJECT: Enter the project name, state and whether it is new or continuing.

LOCATION: Enter a brief description of the project location, clearly identifying major landmarks, counties, and municipalities in the project vicinity.

DESCRIPTION: Enter a brief description of the plan of improvement clearly identifying major project features and differentiating between programmed and unprogrammed work. Indicate if project is part of a system. For reservoir projects, include breakdown of storage by function. Differentiate between programmed and unprogrammed work.

AUTHORIZATION: Enter the act authorizing the project, such as: Water Resources Development Act of 19xx.

REMAINING BENEFIT-REMAINING COST RATIO: Enter the RBRCR for the project at the applicable discount rate, such as: 2.6 to 1 at 5 1/8 percent. Use the applicable rate discount from Table B-2.2. If the project is substantially complete and the RBRCR is no longer meaningful, enter: Not applicable because project construction is substantially complete. For beach erosion control projects where the initial fill has been completed and only periodic nourishment remains to be accomplished, enter: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: Enter the total benefit-cost ratio for the project at the applicable discount rate, such as: 1.8 to 1 at 5 1/8 percent. Use the applicable discount rate from Table B-2.2

INITIAL BENEFIT-COST RATIO: Enter the benefit-cost ratio at the applicable discount rate and the fiscal year for which Congress appropriated initial construction funds such as: 1.11 to 1 at 5 1/8 percent (FY 19xx). Omit this item for PY new construction starts. Use the applicable discount rate from Table -2.2

ILLUSTRATION B-2.4 (Continued)

BASIS OF BENEFIT-COST RATIO: Indicate the basis of the benefit-cost ratios, such as: Benefits are from the latest available evaluation approved in (month) 19xx at 19xx price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan 19xx)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
(For projects with an unprogrammed balance to complete, but no future non-Federal reimbursement.)				Element A Element B	xx 0	May 19xx Indefinite
				(For shore protection projects)		
Estimated Federal Cost		xx,xxx,xxx		Initial Construction	xx	Sep 19xx
Programmed Construction	xx,xxx,xxx			Periodic Nourishment	xx	Jun 19xx
Unprogrammed Construction	xx,xxx,xxx			Entire Project	xx	Jun 19xx 2/
Estimated Non-Federal Cost		xx,xxx,xxx		PHYSICAL DATA		
Programmed Construction	xx,xxx,xxx			Under appropriate subheadings, enter the significant physical data on the major project facilities, indicating the project scope.		
Cash Contributions	xx,xxx,xxx					
Other Costs	xx,xxx,xxx					
Estimated Non-Federal Cost						
Unprogrammed Construction	xx,xxx,xxx					
Cash Contributions	xx,xxx,xxx					
Other Costs	xx,xxx,xxx					
Total Estimated Programmed Construction Cost		xx,xxx,xxx				
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx				
Total Estimated Project Cost		xx,xxx,xxx				

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ILLUSTRATION B-2.4 (Continued)

SUMMARIZED FINANCIAL DATA (Continued)	ACCUM PCT OF EST FED COST	STATUS (1 Jan 19xx)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September PY-2	xx,xxx,xxx			
Conference Allowance for PY-1	xx,xxx,xxx			
Allocation for PY-1	xx,xxx,xxx	1/		
Allocations through PY-1	xx,xxx,xxx	xx		
Allocation Requested for PY	xx,xxx,xxx	xx		
Programmed Balance to Complete after PY	xx,xxx,xxx			
Unprogrammed Balance to Complete after PY	xx,xxx,xxx			

1/ Reflects \$xxx reduction assigned as savings and slippage, \$xxx sequestered in accordance with the Gramm-Rudman-Hollings Act, and \$xxx reprogrammed to (from) the project. (Use example as applicable).

2/ For programmed work only; remaining work is unprogrammed pending a decision to construct these features.

JUSTIFICATION: Enter an explicit and factually objective presentation of the merits of the project, i. e., an answer to the question: "Why now?" In narrative form, present your best case. The following information, when related to recent events or the current state of the economy, is more convincing than a simple recitation of facts.)

For flood control projects, state the present value and type of property subject to flood damage; the average annual damages, with and without the project; the flood frequency against which protection is to be provided; the maximum flood of record; the damage sustained at that time and what it would be now; the frequency and duration of flooding; recent flood experience; and any other data which indicate the magnitude

ILLUSTRATION B-2.4 (Continued)

and severity of the flood problem and the need for protection. If more than 20 percent of urban flood damage prevention benefits are future benefits, explain the basis for such future benefits. In particular, estimated benefits for prevention of damages to household contents must be in accordance with the most recent CECW-P guidance. Does project directly or indirectly support future flood plain development in areas other than those near already urbanized areas or where flood plain values have been largely lost? Does it avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands and/or other environmental attributes?

For commercial navigation projects, discuss major commodities imported and exported; average commerce tonnage over the most recent 10-year period; savings per ton for selected commodities; availability of dredged material disposal sites; and size of ships expected to call at the port in the future.

For water supply or hydroelectric power generation projects, specify the storage provided, and the potential sponsor(s) who has agreed to fully finance the applicable costs.

Similar specific data should be provided for other types of projects and purposes.

Identify those counties, districts, Indian reservations, or other areas which qualify as areas of "substantial and persistent" unemployment using the procedures in the Principles and Guidelines. The construction activities must be physically located in such areas in order for the benefits from employment of previously unemployed labor resources to be included in the project's justification.

Discuss the extent to which project beneficiaries have made investments other than the required items of local cooperation whose return is contingent upon completion of the Federal project.

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ILLUSTRATION B-2.4 (Continued)

Include a tabular listing of annual benefits as the final item of the justification paragraph if there is more than one applicable benefit category, such as: Average annual benefits are as follows:

Annual Benefits	Amount
Benefit 1	x,xxx,xxx
Benefit 2	x,xxx,xxx
Benefit 3	x,xxx,xxx
Total	xx,xxx,xxx

FISCAL YEAR PY: Enter a tabular explanation of how the PY funds will be used, such as: The requested amount will be applied as follows:

Initiate .....	\$x,xxx,xxx
Initiate and complete .....	x,xxx,xxx
Continue .....	x,xxx,xxx
Complete .....	x,xxx,xxx
Planning, Engineering, and Design for parent project	x,xxx,xxx
Planning, Engineering, and Design for Element A	x,xxx,xxx
Planning, Engineering, and Design for Element B	x,xxx,xxx
Construction Management	x,xxx,xxx
Total	\$xx,xxx,xxx

NON-FEDERAL COST: Enter a separate tabular explanation of the requirements of local cooperation included in each project cooperation agreement applicable to the project together with the associated payments during construction, reimbursements, and annual operation, maintenance, repair, rehabilitation, and replacement costs, such as: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act Of 1986, as amended,, the non-Federal sponsor must comply with the requirements listed below.

ILLUSTRATION B-2.4 (Continued)

	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Requirements of Local Cooperation		
Separable Element A (Repeat as applicable for each separable element).		
Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas (as applicable), (add if appropriate) which may be reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968) after reductions for such credit have been made in the required cash payments.	x,xxx,xxx	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	x,xxx,xxx	
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities.	x,xxx,xxx	x,xxx

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ILLUSTRATION B-2.4 (Continued)

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, repair, rehabilitation and replacement of municipal and industrial water supply facilities.	x,xxx,xxx	x,xxx
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation facilities.	x,xxx,xxx	x,xxx
Pay one-half of the separable and joint costs allocated to recreational navigation and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreational navigation facilities.	x,xxx,xxx	x,xxx
Pay xx percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to (include one of the following) 25 percent, 35 percent, or xx percent, as determined under Section 103 (m) of the Water Resources Development Act Of 1986, as amended, (add if appropriate) to reflect the	x,xxx,xxx	x,xxx



ILLUSTRATION B-2.4 (Continued)

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
non-Federal sponsor's ability to pay as reduced for credit allowed based on prior work (Section 104 of the Water Resources Development Act Of 1986, as amended, or Section 215 of the Flood Control Act of 1968), or pay 5 percent of the costs allocated to flood control (if the non-Federal share of flood control costs is 25 percent or 35 percent (as applicable) or greater), and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities.	x,xxx,xxx	x,xxx
Pay xx percent of the costs allocated to fish and wildlife enhancement, and pay xx percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife facilities.	x,xxx,xxx	x,xxx
Pay 35 percent of the costs allocated to hurricane and storm damage reduction, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities.		

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ILLUSTRATION B-2.4 (Continued)

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay (include one of the following) 35 percent or xx percent, as determined under Section 103 (m) of the Water Resources Development Act Of 1986, as amended, to reflect the non-Federal sponsor's ability to pay, of the costs allocated to agricultural water supply, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of agricultural water supply facilities.	x,xxx,xxx	x,xxx
Pay xx percent of the costs allocated to general navigation facilities during construction and pay 50 percent of the costs of incremental maintenance below 45 feet below mean low water.	x,xxx,xxx	x,xxx
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially (entirely) reduced by a credit allowed for the value of lands, easements, rights of way, relocations , and dredged or excavated material disposal areas as applicable) provided for commercial navigation.	x,xxx,xxx	
Total Non-Federal Costs	x,xxx,xxx	x,xxx

ILLUSTRATION B-2.4 (Continued)

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 years following completion of construction (Use example as applicable).

Note: After approval by the ASA(CW), local credit based on ability to pay (Section 103 (m) of the Water Resources Development Act of 1986, as amended,) or general credit for prior work (Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968) must be reflected in the requirements of local cooperation as an offset to required cash contributions or, if necessary, LERRD contributions. However, any credit provided under Section 104 of the Water Resources Development Act of 1986, as amended, or Section 215 of the Flood Control Act of 1968 may not be used to offset the required 5 percent cash contribution.

STATUS OF LOCAL COOPERATION: Identify the non-Federal sponsor, the current status of assurances, the current status of the PCA, actions being taken by the non-Federal sponsor toward compliance with the requirements of local cooperation, contributions made, bond issues passed, or other specific items. If known, state the method by which the non-Federal sponsor intends to provide its share of the project first costs (cash and other items of local cooperation) and annual O&M costs. List all potential sources of funds (together with dollar amounts, if known) to meet local cooperation requirements, including any anticipated Federal funds for which the Federal granting agency has indicated in writing that the use of such funds for items of local cooperation is authorized. List and describe any local work or investments that have already been made or are underway which would serve to fulfill all or part of the local cooperation requirements (including work accomplished pursuant to Section 215 of the 1968 Flood Control Act or creditable under Section 104 of the 1986 Water Resources Development Act.)

In the event a PCA has not been executed by the ASA(CW), provide the scheduled month and year when the PCA is scheduled to be executed.

For projects with future non-Federal reimbursement, indicate the specific conditions which govern the initiation of non-Federal reimbursement payments and the scheduled date such reimbursement payments are scheduled to begin.

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ILLUSTRATION B-2.4 (Continued)

For each project with an executed PCA, compare the approved non-Federal cost estimate in the PCA with the current non-Federal cost estimate and provide an assessment of the non-Federal sponsor's financial capability to contribute toward any increased costs and an indication of the sponsor's willingness to share in any increased costs, such as: The current non-Federal cost estimate of \$8,000,000, which includes a cash contribution of \$3,000,000, is an increase of \$1,000,000 from the non-Federal cost estimate of \$7,000,000 noted in the Project Cooperation Agreement, which included a cash contribution of \$2,500,000. In a letter dated 3 March 19xx, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES: Enter a tabular explanation of the changes in the Federal (Corps) cost estimate from the last estimate presented to Congress to the current estimate, such as: The current Federal cost estimate of \$xxx,xxx,xxx is an increase (decrease) of \$xx,xxx,xxx from the latest estimate (\$xxx,xxx,xxx) presented to Congress (FY 19xx). This change includes the following items.

Item	Amount
Price Escalation on Construction Features	\$x,xxx,xxx
Design Changes	x,xxx,xxx
Additional Functions Added under General Authority	x,xxx,xxx
Authorized Modifications	x,xxx,xxx
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	x,xxx,xxx
Schedule Changes	x,xxx,xxx
Price Escalation on Real Estate	x,xxx,xxx
Total	\$x,xxx,xxx

ILLUSTRATION B-2.4 (Continued)

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Indicate the status of the environmental impact statement, such as: The final EIS was filed with EPA on 28 September 19xx.

OTHER INFORMATION: Indicate when funds were appropriated to initiate preconstruction engineering and design and construction, respectively, such as: Funds to initiate preconstruction engineering and design were appropriated in FY 19xx and funds to initiate construction were appropriated in FY 19xx. If the scheduled completion date for programmed work has changed from the date last presented to Congress, explain the changes, such as: The scheduled completion date of June 19xx for programmed work is a (slippage or acceleration) from the latest completion date of March 19xx presented to Congress. This change is due to ..... Also, note any problems that should be considered by the Committees which might affect the progress schedule shown in your program request, as well as your expectations for and timing of a resolution of the problems. Fish and Wildlife Mitigation costs should also be separately identified and reflected in this paragraph.

Separable Element A (Repeat as necessary for each programmed separable element.)

SUMMARIZED FINANCIAL DATA: For ongoing projects with programmed separable elements, provide a breakdown of the summarized financial data for each programmed separable element in the same format as displayed for the parent project, except that the allocations and conference allowance information is not required.

REMAINING BENEFIT-REMAINING COST RATIO: Enter the RBRCR for each programmed separable element at the applicable discount rate, such as: 2.6 to 1 at 5 1/8 percent. Use the applicable rate discount from Table B-2.2. If the element is substantially complete and the RBRCR is no longer meaningful, enter: Not applicable because construction is substantially complete.

TOTAL BENEFIT-COST RATIO: Enter the total benefit-cost ratio for each programmed separable element at the applicable discount rate, such as: 1.8 to 1 at 5 1/8 percent. Use the applicable discount rate from Table B-2.2

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ILLUSTRATION B-2.4 (Continued)

Note: The justification sheets must be typed on standard size paper, 8 1/2 inches by 11 inches, as left justified Word97 or earlier version documents at 6 lines per inch (.167 inch line height) using a landscape 10 point font (12 characters per inch); Courier or Arial are the preferred typefaces. The typed material must be confined to 6 1/2 inches vertically and 10 inches horizontally, leaving 1/2 inch margins on the left and right sides, and 1 inch margins on the top and bottom. The appropriation title and project classification must be typed as the first line in the body and the Division, District, and project name must be typed in the 1 inch bottom margin. Do not underline any headings. The June submission must be submitted by email as a Word97 or earlier version document. See paragraph 11.b.(2).(a). of the main EC for specific instructions concerning conversion of your justification sheets to an Adobe Acrobat 4.0 file for transmission of the Congressional submission to HQ.

ILLUSTRATION B-2.4 (Continued)

Additional Examples of Summarized Financial Data

For projects with no unprogrammed balance to complete, and no future non-Federal reimbursement.

Estimated Federal Cost	xx,xxx,xxx
Estimated Non-Federal Cost	xx,xxx,xxx
Cash Contributions	xx,xxx,xxx
Other Costs	xx,xxx,xxx

Total Estimated Project Cost	xx,xxx,xxx
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For projects with both an unprogrammed balance to complete and future non-Federal reimbursement.

Estimated Total Appropriation Requirement	xx,xxx,xxx
Programmed Construction	xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx

Future Non-Federal Reimbursement	xx,xxx,xxx
Programmed Construction	xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx

Estimated Federal Cost (Ultimate)	xx,xxx,xxx
Programmed Construction	xx,xxx,xxx
Unprogrammed Construction	xx,xxx,xxx

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ILLUSTRATION B-2.4 (Continued)

For projects with both an unprogrammed balance to complete and future non-Federal reimbursement (continued).

Estimated Non-Federal Cost		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Cash Contributions	xxx,xxx	
Other Costs	xxx,xxx	
Reimbursements	xxx,xxx	
Purpose 1	xxx,xxx	
Purpose 2	xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Cash Contributions	xxx,xxx	
Other Costs	xxx,xxx	
Reimbursements	xxx,xxx	
Purpose 1	xxx,xxx	
Purpose 2	xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement.

Estimated Total Appropriation Requirement	xx,xxx,xxx
Future Non-Federal Reimbursement	xx,xxx,xxx
Estimated Federal Cost (Ultimate)	xx,xxx,xxx



ILLUSTRATION B-2.4 (Continued)

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement (continued).

Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Project Cost		xx,xxx,xxx

For projects with an unprogrammed balance to complete, future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Appropriation Requirement (CoE)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Appropriation Requirement (OFA)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Total Appropriation Requirement		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	

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ILLUSTRATION B-2.4 (Continued)

For projects with an unprogrammed balance to complete, future non-Federal reimbursement, and where an additional Federal agency is involved (continued).

Future Non-Federal Reimbursement		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Federal Cost (Ultimate) (CoE)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Non-Federal Cost		xx,xxx,xxx
Programmed Constructions	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx

ILLUSTRATION B-2.4 (Continued)

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement and where an additional Federal agency is involved.

Estimated Appropriation Requirement (CoE)	xx,xxx,xxx
Estimated Appropriation Requirement (OFA)	xx,xxx,xxx
Estimated Total Appropriation Requirement	xx,xxx,xxx
Future Non-Federal Reimbursement	xx,xxx,xxx
Estimated Federal Cost (Ultimate)	xx,xxx,xxx
Estimated Non-Federal Cost	xx,xxx,xxx
Cash Contributions	xx,xxx,xxx
Other Costs	xx,xxx,xxx
Reimbursements	xx,xxx,xxx
Purpose 1	xx,xxx,xxx
Purpose 2	xx,xxx,xxx
Total Estimated Project Cost	xx,xxx,xxx

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ILLUSTRATION B-2.4 (Continued)

The funding status for projects authorized to use funds appropriated from the Inland Waterways Trust Fund will be displayed as shown below.

	GENERAL APPNS.	INLAND WATERWAYS TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September PY-2	xx,xxx,xxx	xx,xxx,xxx	
Conference Allowance for PY-1	xx,xxx,xxx	xx,xxx,xxx	
Allocation for PY-1	xx,xxx,xxx 1/	xx,xxx,xxx 1/	
Allocations through PY-1	xx,xxx,xxx	xx,xxx,xxx	xx
Allocation Requested for PY	xx,xxx,xxx	xx,xxx,xxx	xx
Programmed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	
Unprogrammed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	

1/ Reflects \$xxx reduction assigned as savings and slippage, \$xxx sequestered in accordance with the Gramm-Rudman-Hollings Act, and \$xxx reprogrammed to (from) the project. (Use example as applicable).

ILLUSTRATION B-2.4 (Continued)

The funding status for projects authorized to use funds appropriated from the Harbor ~~Maintenance Trust~~ Services Fund will be displayed as shown below.

	GENERAL APPNS.	HARBOR MAINTENANCE TRUST FUNDS	ACCUM. PCT. OF EST. FED. COST
Allocations to 30 September PY-2	xx,xxx,xxx	xx,xxx,xxx	
Conference Allowance for PY-1	xx,xxx,xxx	xx,xxx,xxx	
Allocation for PY-1	xx,xxx,xxx 1/	xx,xxx,xxx 1/	
Allocations through PY-1	xx,xxx,xxx	xx,xxx,xxx	xx
Allocation Requested for PY	xx,xxx,xxx	xx,xxx,xxx	xx
Programmed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	
Unprogrammed Balance to Complete after PY	xx,xxx,xxx	xx,xxx,xxx	

1/ Reflects \$xxx reduction assigned as savings and slippage, \$xxx sequestered in accordance with the Gramm-Rudman-Hollings Act, and \$xxx reprogrammed to (from) the project. (Use example as applicable).

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ILLUSTRATION B-2.4 (Continued)

For deficiency correction projects and modifications to existing projects with no unprogrammed balance to complete and no future non-Federal reimbursement.

Original Project

Actual Federal Cost		xx,xxx,xxx
Actual Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Original Project Cost		xx,xxx,xxx

Remedial Work or Project Modification

Estimated Federal Cost		xx,xxx,xxx
Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Estimated Remedial or Modification Cost		xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx

ILLUSTRATION B-2.4 (Continued)

For deficiency correction projects and modifications to existing projects with no unprogrammed balance to complete but with future non-Federal reimbursement.

Original Project

Actual Federal Cost		xx,xxx,xxx
Actual Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Original Project Cost		xx,xxx,xxx

Remedial Work or Project Modification

Estimated Total Appropriation Requirement		xx,xxx,xxx
Future Non-Federal Reimbursement		xx,xxx,xxx
Estimated Federal Cost (Ultimate)		xx,xxx,xxx
Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Project Cost		xx,xxx,xxx

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ILLUSTRATION B-2.4 (Continued)

For projects with an unprogrammed balance to complete, no future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Federal Cost (CoE)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Federal Cost (OFA)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Non-Federal Cost		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx



ILLUSTRATION B-2.4 (Continued)

For projects which include beach nourishment with no unprogrammed balance to complete, no future non-Federal reimbursement, and where no additional Federal agency is not involved.

Estimated Federal Cost		xx,xxx,xxx
Initial Construction	xx,xxx,xxx	
Periodic Nourishment	xx,xxx,xxx	
Estimated Non-Federal Cost		xx,xxx,xxx
Initial Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Periodic Nourishment	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Estimated Project Cost		xx,xxx,xxx
Initial Construction	xx,xxx,xxx	
Periodic Nourishment	xx,xxx,xxx	

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ILLUSTRATION B-2.4 (Continued)

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where no additional Federal agency is involved.

Estimated Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Non-Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		

ILLUSTRATION B-2.4 (Continued)

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where no additional Federal agency is involved (continued).

Estimated Non-Federal Cost		
Unprogrammed Construction		xx,xxx,xxx
Initial Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Periodic Nourishment		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Initial Construction		xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Initial Construction		xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx
Initial Construction		xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx

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ILLUSTRATION B-2.4 (Continued)

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Federal Cost (CoE)			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Federal Cost (OFA)			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Estimated Non-Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Initial Construction	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Periodic Nourishment	xx,xxx,xxx		
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		

ILLUSTRATION B-2.4 (Continued)

For projects which include beach nourishment with an unprogrammed balance to complete, no future non-Federal reimbursement, and where an additional Federal agency is involved. (continued)

Estimated Non-Federal Cost		
Unprogrammed Construction		xx,xxx,xxx
Initial Construction	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Periodic Nourishment	xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Total Estimated Programmed Construction Cost		xx,xxx,xxx
Initial Construction		xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost		xx,xxx,xxx
Initial Construction		xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx
Total Estimated Project Cost		xx,xxx,xxx
Initial Construction		xx,xxx,xxx
Periodic Nourishment		xx,xxx,xxx

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ILLUSTRATION B-2.6  
PY PROPOSED NEW MAJOR REHABILITATION AND OTHER NEW WORK SUMMARY

Division:

Category and Proj or Elem Names	Total Proj Elem Cost \$000	Total Fed Appn Rqmt \$000	Total IWTF Appn Rqmt \$000	Total HSF Appn Rqmt \$000	Total Non-Fed Cost \$000	RBR CR at Appl Rate 1/	Type Type of Rpt and Status 2/	Addl Cong Auth Reqd Y/N 3/	Sched PCA Exec Date Mo/Yr 4/	First Const Ct Awd Date Mo/Yr 4/	PY Divn Rcmd \$000
--	--	---------------------------------------	--	---------------------------------------	-----------------------------------	---------------------------------	---	--	--	--	-----------------------------

New major rehabilitation projects  
New Deficiency Correction Projects  
New Reconstruction Projects  
Resumptions  
Unstarted Projects  
Unstarted Separable Elements  
Additional Recreation Facilities

1/ Show the RBR CR at the applicable rate. Not applicable to deficiency correction projects.

2/ Indicate the type of report (Recon, EDR, Reeval) on which the Division request is based and show the latest submission, revision, or approval action and date (month and year) with respect to HQUSACE CECW-E, CECW-P, or CECW-AR, as applicable, review and approval, e.g., S Jan XX for a report that has been submitted to HQUSACE CECW-E, CECW-P, or CECW-AR, as applicable, but not yet reviewed/approved, R Feb XX for a report that has been returned to the field for revision and A Apr XX for a report that has been reviewed/approved by HQUSACE CECW-E, CECW-P, or CECW-AR, as applicable.

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)

ILLUSTRATION B-2.6 (Continued)  
PY PROPOSED NEW MAJOR REHABILITATION AND OTHER NEW WORK SUMMARY

Division:

- 3/ Indicate whether (Y) or not (N) the project/element requires additional Congressional authorization for the proposed construction work.
- 4/ Show the scheduled month and year for PCA execution, e.g. Apr XX.
- 5/ Show the month and year of the first construction contract award for the proposed work, e.g. Jun XX.

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ILLUSTRATION B-2.7  
NEW START CONSTRUCTION CHECKLIST

Project Name	Authorization Status 1/	Preconstruction Engineering and Design Status 2/	Remaining Benefit/ Cost Ratio 3/	Basic Criteria Met (Yes/No) 4/	Sched PCA Exec Date Mo/Yr 5/	Preliminary Selection Criteria Met (Yes/No)
-----------------	----------------------------	--	---	--------------------------------------	--	--

(List all new start construction projects which are recommended for construction in the PY.)

1/ Cite Authorizing Act, date of resolution for Section 201, or completion date of the Chief of Engineers report included in the feasibility report or EDR.

2/ The project should not be recommended if PED will not be sufficiently complete to allow award of the first construction contract during the fourth quarter of the PY, or by the end of the PY+1 if the sponsor must acquire needed real estate, or if the M-CACES baseline cost estimate or the PMP has not been approved. Planning, engineering and design should be far enough along in the PY so that the orderly and continuous progression of construction is assured with the programmed award of the first construction contract.

3/ Based on applicable rate (cite discount rate and approval date of last approved economic analysis in parentheses after BCR). Footnote projects where authorization is not based on formal benefit/cost evaluation.

4/ Projects having an unapproved Reevaluation Report involving a significant change in project scope or cost or for addition of fish and wildlife mitigation measures will not meet the basic criteria unless the required change(s) recommended in the Reevaluation Report are scheduled for approval by ASA(CW) by 1 August of the PY-2.

5/ Show the scheduled month and year for PCA execution, e.g. Apr XX.

FOR ILLUSTRATION PURPOSES ONLY  
(To be typed as necessary)



APPENDIX B-3  
CONSTRUCTION, GENERAL - CONTINUING AUTHORITIES PROGRAM,  
PROJECT MODIFICATIONS FOR IMPROVEMENT OF THE ENVIRONMENT,  
WETLAND AND OTHER AQUATIC HABITAT CREATION,  
AQUATIC ECOSYSTEM RESTORATION, AND  
RIVERINE ECOSYSTEM RESTORATION AND FLOOD HAZARD MITIGATION

B-3.1. **General.** The programs consist of the following continuing authorities:

- a. Section 107, 1960 RHA, as amended, for navigation projects, Code 902-216
- b. Section 111, 1968 RHA, as amended, for mitigation of shore damages attributable to Federal navigation projects, Code 902-232
- c. Section 103, 1962 RHA, as amended, for beach erosion control projects, Code 902-420
- d. Section 205, 1948 FCA, as amended, for flood control projects, Code 902-516
- e. Section 14, 1946 FCA, as amended, for emergency streambank and shoreline protection of public and non-profit facilities and services, Code 902-517
- f. Section 208, 1954 FCA, as amended, for snagging and clearing projects for flood control, Code 902-518
- g. Section 1135, 1986 WRDA, as amended, for modifications to structures and operations of constructed Corps projects to improve the quality of the environment, Code 902-722.
- h. Section 204, 1992 WRDA for beneficial uses of dredged material for the protection, restoration, and creation of aquatic and ecologically related habitats, including wetlands, Code 902-790.
- i. Section 206, 1996 WRDA for aquatic ecosystem restoration to improve the quality of the environment, Code 902-732.
- j. Section 212, 1999 WRDA for riverine ecosystem restoration and flood hazard mitigation, Code 902-552.

B-3.2. **Submission Requirements.**

a. ER 1105-2-100, subject: Guidance for Conducting Civil Works Planning Studies requires twice-yearly funding status updates of the Continuing Authorities Program National Database Management System be accomplished. The database includes funding schedules for Section 204, Section 206, and Section 1135 projects. These data updates are sufficient to develop the PY program. No separate submission for the Continuing Authorities Program is required. Also, no separate submission is required for Section 204, Section 206, and Section 1135 projects except for those which are specifically programmed. For these projects, follow the instructions in Appendix B-2 for other specifically programmed projects.

b. No separate submission is required for riverine ecosystem restoration and flood hazard mitigation projects. Specific guidance for these projects is being developed and will be provided shortly.



APPENDIX B-4  
CONSTRUCTION, GENERAL—RECREATION MODERNIZATION

**B-4.1. General.** A new initiative in fiscal year 2001, modernization of recreation facilities with state of the art materials and designs can reduce the cost of future maintenance, as well as eliminate much of the costly maintenance backlog.

**B-4.2 Definitions.** Recreation modernization is defined as the renovation and updating of Corps managed recreation areas to meet the needs of present users, underserved populations, and future generations.

**B-4.3 Appropriation Account.** Funding for the modernization program will be through the Construction, General (CG) appropriation except for initial preparation of the proposals and subsequent engineering and design work, which should be accomplished with Operation and Maintenance (O&M) funds. Funds will be appropriated annually in a lump sum. HQUSACE will allocate appropriated funds to approved and prioritized modernization proposals. The funding of recreation modernization proposals will be based on merit.

**B-4.4. Geographic Scope.** Each year, the Major Subordinate Commands will be assigned a target number of proposals, as part of the program EC, that they may submit for the modernization of Corps managed recreation areas. The proposals will be submitted annually to CECW-ON no later than 15 June. Proposals must be prioritized by MSC. Consistent with criteria established for the fiscal year 2001 program recommendation MSC recommendations will be evaluated and prioritized within the CG target allocated for this effort. Following the receipt of all MSC proposals, HQUSACE (CECW-ON) will convene a meeting of MSC representatives to prioritize the MSC proposals from a national perspective. MSC representatives will be expected to explain the MSC ranking and why their proposals were ranked the way they were. Both day use and camping must be given equal consideration in spite of the fact that day use recreation areas generate less recreation revenues. Following the annual receipt of the Construction, General appropriation, funds will be allotted based on this national prioritization.

**B-4.5. Submission Requirements.** General instructions for submissions are contained in paragraph 11 of the main text of this EC. Each proposal must include a narrative portion no longer than four pages (a standard format for the narrative portion of the proposal is attached), a map of the lake orienting the location of the recreation area, and captioned, illustrative digital photos that show the existing condition of the recreation facilities/infrastructure and/or management problems that will be corrected by the modernization of the recreation area. In addition to meeting the common sense test, as a minimum, the narrative must address:

- a. The name of the District, the water resources project and the recreation area.
- b. The PWI number of the project.
- c. The State name in which the recreation area is located.
- d. The Congressional District(s) in which the recreation area is located.
- e. The annual visitation to this recreation area for the last five years (visitors/year)
- f. The projected annual visitation following modernization of the area (visitors/year).
- g. Clear evidence of public involvement and support of modernization of the area.

- ~~h. The ability to execute modernization of the recreation area in the budget year.~~
- ~~i. The impact of the modernization of the recreation area on the local and regional economy.~~
- ~~j. The current condition of the recreation area. Include both facility and management problems that may be occurring and historic utilization levels of the area.~~
- ~~k. The annual recreation revenues from this recreation area for the last five years (both camping and day use).~~
- ~~l. The projected annual recreation revenue following modernization of the area (both camping and day use).~~
- ~~m. The modernization actions proposed for the recreation area (please list major actions).~~
- ~~n. The projected cost of the modernization by major action (include E&D).~~
- ~~o. Any projected O&M savings that will result from the modernization of this recreation area (\$ per year).~~
- ~~p. Certification at the bottom of the proposal by the respective District Chief of Operations and DDEPM that the proposal is complete and accurate.~~

**B-4.6. Evaluation Criteria.** The proposals will be evaluated using the following criteria:

- ~~a. Meets local and regional needs based on public involvement input.~~
- ~~b. The impact on recreation revenues.~~
- ~~c. The impact on long term O&M (O&M cost savings, consolidation, etc.)~~
- ~~d. The reduction/elimination of environmental degradation.~~
- ~~e. Accessibility for persons with disabilities.~~
- ~~f. Cures safety and public health problems.~~
- ~~g. Facilities within the recreation area will meet minimum Corps facility standards following modernization.~~

**B-4.7. Funding for Planning and Engineering.** Engineering and design and plans and specifications should accomplished with O&M funds until CG funds are allocated.

**ILLUSTRATION B-4**  
**Standard Narrative Format for Recreation Modernization Proposals**

MSC. \_\_\_\_\_  
 Modernization Proposal - Priority Number (MSC priority). \_\_\_\_\_  
 District \_\_\_\_\_  
 Water Resource Project Name and State \_\_\_\_\_  
 PWI Number. \_\_\_\_\_  
 Recreation Area Name. \_\_\_\_\_

1. Current condition of the recreation area:
2. Congressional District(s) in which the recreation area is located: (District number and name of Congressman)

Visitation (visitors/year) and Revenue (\$ (PY is the program year modernization will take place)										
	PY-6	PY-5	PY-4	PY-3	PY-2	PY-1	PY	PY+1	PY+2	PY+3
<b>Visitation</b>										
<b>Revenue (Total)</b>										
<b>Day Use Revenue</b>										
<b>Camping Revenue</b>										

3. Evidence of public involvement and support of modernization of the area:
4. Impact on the local and regional economy:
5. The proposed modernization and cost:  
~~(This form will be refined to reflect a narrative description of work to be done and a cost summary.~~

Proposed Action \_\_\_\_\_ Projected Cost  
 \$ \_\_\_\_\_

Cost Estimate \_\_\_\_\_ \$  
 xx% Contingency \$ \_\_\_\_\_

Total Cost \_\_\_\_\_ \$

6. Projected O&M savings that will result from the modernization of this recreation area (\$ per year):

I certify that this proposal is complete and accurate and that the modernization of this recreation area can be accomplished in the program year.

/s/ \_\_\_\_\_ /s/  
 District Chief of Operations \_\_\_\_\_ DDEPM

APPENDIX C  
OPERATION AND MAINTENANCE, GENERAL  
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SUBAPPENDIX C-1  
OPERATION AND MAINTENANCE, GENERAL

C-1.1. **Appropriation Title.** This appendix provides guidance for preparation of the program request for all Operation and Maintenance activities under the appropriation titles: Operation and Maintenance, General (O&M) and Flood Control, Mississippi River and Tributaries, Maintenance (MR&T) for the Program Fiscal Year.

C-1.2. **Activities Included.**

<u>Activities</u>	<u>Category/Class/ Subclass Code</u>		<u>Guidance Provided in Subappendix Number</u>
	<u>O&amp;M</u> <b>(903)</b>	<u>MR&amp;T</u> <b>(908)</b>	
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## SUBAPPENDIX C-2

### OPERATION & MAINTENANCE, GENERAL - PROJECT OPERATION AND MAINTENANCE

C-2.1. **Purpose and Scope.** This subappendix provides policy and general procedural guidance for developing programs for the Project Operation and Maintenance (O&M), and National Emergency Preparedness programs. To provide a general framework and uniform approach for program development and justification, four incremental funding levels have been defined. The various work items have been grouped by Work Category Code (WCC) for purposes of defining the appropriate funding levels. Guidance for the electronic transmission of automated data for submittal of program recommendations is contained in the Civil Works Operation and Maintenance Windows Automated Program System (WINABS) Manual, available on the Civil Works Home Page (<http://www.cecer.army.mil/pl/abs>) Procedures for preparing input, for generating reports, and for updating data are also included in that manual.

#### C-2.2. Program Development Principles.

a. **General Philosophy.** The O&M program should be developed in recognition of the need to preserve the existing infrastructure and provide justified levels of service at least cost, in accordance with established criteria. In order to do so, the operations portion of the program should be constrained to the greatest degree possible so as to maximize the proportion of available resources that can be devoted to maintenance requirements. In effect, this means that additional management efficiencies must be employed at every opportunity to generate savings that can be applied toward reducing the inventory of unfunded maintenance.

- (1) **Established Criteria** is defined as the standard with specific guidelines which are formulated by the administration which clarify and describe "justified levels of service."
- (2) **Justified Level of Service** is defined as the delivery of a supportable and defensible amount or degree of project benefits consistent with authorization, use, and administration policies.
- (3) **Least Cost** is defined as the lowest amount of expense that a prudent manager would select, balancing between short and long term economics and considering overall availability of resources.

b. **Relationship to Program Execution.** Good program execution is an essential ingredient in securing the resources needed to ensure a viable O&M program and thereby continue to provide the Nation with the benefits for which water resources projects were constructed. Development of the program is directly related to program execution. Therefore, it is imperative to develop a sound and realistic program that can be executed as scheduled in accordance with commitments to customers. The baseline programming process described in this subappendix has been designed to facilitate both program development as well as execution. If the procedures outlined in this subappendix are implemented in a consistent manner throughout the Corps, the result should be: (1) a credible program that can be defended within the Administration and Congress, (2) a sufficient allowance of O&M funds and (3) a high degree of fiscal performance.

c. **Operations (Work Category Codes 601-606).** All operations features should be closely examined to reduce costs wherever possible. While there may be some cost fluctuation among individual projects, the goal is to reduce, or at least constrain, the aggregate total growth of operations costs in the MSC to no more than inflation. Efficiency improvements should be employed to reduce operations costs, where possible.

d. **Maintenance (Work Category Codes 611-616).** Prudent stewardship of available resources is essential to preserve the existing infrastructure. The growing and aging inventory of projects dictates that

resources be concentrated on the maintenance features of the program to the maximum extent possible. Just as with operations, the maintenance features should be reviewed and efficiency measures employed to reduce costs.

e. **Priorities.** The MSC and district commanders must ensure that the program request provides balanced and equitable treatment to all business functions (navigation, flood damage reduction, hydropower, environmental stewardship, and recreation).

f. **O&M Cost Savings Initiative.** This initiative is a methodology that has been developed to reduce the cost of operating and maintaining the Nation's water resources infrastructure, while still providing justified levels of project services. This cost reduction initiative - along with other locally generated cost saving measures - should be used to seek more efficient operation and maintenance of projects and to help reduce costs. The savings generated by these initiatives would be applied toward reducing the inventory of unfunded maintenance. All business functions should be continually reviewed to achieve cost savings under these initiatives.

### C-2.3. Program Development and Review Process.

a. **Work Category Codes (WCC).** The Civil Works O&M program development process reflects the Corps compliance with the requirements of the Government Performance and Results Act of 1993. Therefore, the program will be submitted in a form that reflects the five business processes/functions established for the O&M mission. These business functions are Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship and Recreation. In addition, each work package will be tied to a business performance measure and goal for the program year. There are twelve (12) Work Category Codes (WCC) -- six for operations and six for maintenance. The first five of these Work Category Codes are named in accordance with the five business functions (or lines of business) within the operations or maintenance areas. There is also one special WCC in each group for the work packages that cannot be assigned to one specific business function at a project with multiple authorized purposes (Cat/Class 300, Multiple Purpose with Power projects). These two WCCs are to be used only for the joint activities that are incurred at Category/Class 300 multi-purpose projects with power, i.e., those Corps-operated hydropower projects that have more than one authorized purpose and where joint costs are assessed to some user according to a statutory cost allocation. The goals of this program development process are to simplify reporting requirements, reduce the number of program work packages, and create a performance-based program along the lines of the five O&M business functions. The following tables are provided to aid in developing work packages aligned with appropriate business functions, WCCs and subWCCs.

- (1) Table C-2.1 lists WCC's and sub-WCCs in numerical order.
- (2) Table C-2.2 lists WCC'S and sub-WCCs in alphabetical order.
- (3) Table C-2.3a is a matrix that displays the operation WCCs for each business function.

(4)..... Table C-2.3b is a matrix that displays the maintenance WCCs for each business function.

(5) Table C-2.3c describes and defines each WCC for operations activities.

(6) Table C-2.3d describes and defines each WCC for maintenance activities.

b. **Performance-Based Programming.** Each project must enter the Program Year (PY) performance goals into the Outputs subform of the Project Edit Screen in WINABS for those performance measures which are relevant to the project. For example, PY performance goals would be required for the navigation performance measures for a lock project. At the same project, depending on the activities taking place, performance goals may also be required for the recreation and/or environmental performance measures. The number of performance measures for which performance goals are required, and which must be used to justify project work packages, is based on the activities at the project. The PY Tier II performance measures and goals are shown in Table C-2.5 of this subappendix.

For those critical work packages that the district must have funded in the fiscal year, the districts are encouraged to list in their funding argument/justification a quantified description of how funding that work package will contribute to accomplishing the Tier II performance goal for the PY. This information is mandatory for work packages falling within the bottom 10 percent of the target funding level and work packages falling within the first 10 percent beyond the target funding level. The funding argument may also list how funding this work package will contribute to accomplishing the Tier III or IV performance goals for the district or project, where applicable. Although a given project will have a single goal (e.g., 95 percent availability) for a given performance measure, districts may cite different performance levels in the funding arguments for different work packages. For example, funding of the highest priority nondeferrable package may be required to attain 80 percent availability; funding of the next highest priority nondeferrable package may enable the project to meet its goal of 95 percent availability.

c. **Use of New Work Category Codes to Program for Business Functions.** The Work Category Codes are listed as follows:

601XX Operation for Navigation Function  
602XX Operation for Flood Damage Reduction Function  
603XX Operation for Hydropower Function  
604XX Operation for Environmental Stewardship Function  
605XX Operation for Recreation Function  
606XX Joint Activities for Operations  
  
611XX Maintenance for Navigation Function  
612XX Maintenance for Flood Damage Reduction Function  
613XX Maintenance for Hydropower Function  
614XX Maintenance for Environmental Stewardship Function  
615XX Maintenance for Recreation Function  
616XX Joint Activities for Maintenance

The programming and costing process will allow the total costs for a business function to be identified. For example:

(1) A single purpose Cat/Class 100 Navigation project would have all its work packages programmed under the 601XX and 611XX WCCs. These two WCCs would identify the total costs for the Navigation business function at this project.

(2) A Cat/Class 200 flood damage reduction project with recreation and water supply as authorized project purposes might have a water supply agreement where the water customer is responsible for paying all costs but recreation. In this case, all work packages that are non-specific (joint costs) would be shown in WCCs 602XX and 612XX Flood Damage Reduction. All recreation-specific work packages would be shown in 605XX and 615XX, as appropriate, and these costs would not be used in calculation of the water customer's assessment.

Joint Costs used for repayment purposes should not be confused with the term "Joint Activities" as used for programming purposes under the WCC process. (See below.)

(3) A Cat/Class 300 Multiple Purpose Project with Power will have its specific hydropower work packages shown under WCCs 603XX and 613XX. The work packages for joint activities will be shown under WCCs 606XX and 616XX. This allows the Corps to identify the specific costs for hydropower O&M, plus that portion of the costs for joint activities which is allocated to hydropower. During the programming process, a roof repair work package for an administration building at a multipurpose project, for example, would have a portion of the cost of that work package identified with the hydropower business function in accordance with its statutory cost allocation formula. The WINABS program adds hydropower portions of each of these joint activity work packages (WCCs 606XX and 616XX) together with the hydropower-specific work packages (WCCs 603XX and 613XX) to give the representative cost of performing the hydropower business function. Work packages representing specific activities for Recreation or Environmental Stewardship will be costed under the WCCs for those specific business functions; WINABS will add them to their allocated portion of the cost of joint activity packages, apportioned according to the power cost repayment allocation for that project. The O&M Program will then show the amount programmed for each (e.g., Hydropower and Recreation) business functions.

Power cost repayment will be accomplished as is currently done; that is, for each project, the individual WCCs will be given the "purpose code" for "joint costs" or "specific costs" as required by the power repayment cost allocation report. Purpose code is the last two digits of the WCC. Power cost repayment accounting is a separate activity from the programming and execution WCC procedure described herein.

d. **O&M Power Costs in the Pacific Northwest.** Pursuant to the 5 December 1997 Memorandum of Agreement between the Department of Energy, acting by and through the Bonneville Power Administration (BPA), and the Department of the Army, entitled "Direct Funding of Power Operations and Maintenance Costs at Corps Projects", BPA will direct fund O&M Power Costs for Corps projects with hydroelectric power generation facilities for which BPA is the designated Federal power marketing agency. O&M Power Costs include hydropower-specific O&M costs, the power portion of joint O&M activities, and power capital items. The Corps will prepare an Annual Power Program that specifies O&M Power Costs for each applicable project. Annual Power Programs for five consecutive fiscal years will be combined into a Five Year Power Program for purposes of inclusion in the BPA rate base and to fund the Corps O&M power costs.

O&M Power Costs in the Pacific Northwest will be entered into WINABS under a separate appropriation (Bonneville Power Appropriation), and submitted concurrently with the O&M, General program submittal to HQUSACE, in the appropriate funding levels. In addition, work packages for joint activities will be split into two work packages to reflect the appropriate allocation of joint activity costs between the O&M, General and O&M Power Cost appropriations. Work packages for the power portion of large capital joint activity costs require specific dispensation from ASA(CW) to be funded within the O&M, General appropriation. Such packages will be identified as special interest items (see Paragraph C-2. 5).

e. **Work Packages - Primary and Supporting Costs.** In developing a work package, all costs required to accomplish the work should be included. This includes the cost of the primary activity as well as all supporting activities that are required to accomplish the work. For example, a dredging work package should contain the cost of the actual dredging process plus the costs for before and after surveys, engineering and design, real estate requirements, contract supervision, water quality monitoring, etc. In this way, a complete and stand-alone decision package is developed, thereby avoiding situations where the primary work is funded without the necessary supporting activities, or vice versa. This process applies to all WCC-based work packages.

In the past, district organization codes could only be assigned at the work package level in the O&M automated program system. Many districts separated supporting cost work packages from primary cost work packages so that they could run reports showing organizational element cost breakouts. To help districts consolidate supporting activity tasks into primary activity work packages, WINABS is designed to give districts the ability to create task records related to each work package. These task records can be associated with specific district organizational elements so that district offices can run reports showing each organization's program request.

f. **Operation and Maintenance Work Packages.** A continuing effort is required to standardize designations of work packages as either operation or maintenance-related. To provide uniform guidance for the appropriate placement of such work packages within operation or maintenance Work Category Codes, detailed definitions of the operation and maintenance elements of each WCC are provided in Table C-2.3. In addition to these definitions, the following general principles should be applied. Operation work packages may include maintenance that is of a recurring nature, and is integral to continued project operation. Examples include things such as custodial services, removing ice and snow, debris, trash, cleaning; relamping lighting fixtures, routine testing of lubricating and hydraulic oils; replacing packing in valves and glands; replacing electrical brushes and touch-up painting, etc. This work is performed on an annual basis, typically by hired labor or small contract (service contract, purchase order, etc.). All other maintenance work, specifically, non-recurring and non-routine maintenance, should be placed under maintenance Work Category Codes. It is the nature of the work itself which dictates where it should be placed. That is, annual recurring costs for annual recurring work, such as custodial services, belongs under operations Work Category Codes, while annual recurring costs for non-recurring work items, (e.g., minor roof repairs one year, placing signs and markers, painting of guardrails, wall striping, repainting comfort stations, etc.), belong under maintenance Work Category Codes, either within baseline or other funding levels as appropriate.

g. **Appropriate Levels of Work Package Justification.** In a performance-based program, every work package must relate to the accomplishment of an approved performance objective. A work package must be justified based on its contribution to attainment of one or more performance goals for the performance measure(s) of its related performance objective(s). The work package justification is presented as part of the funding argument. The amount of justification required depends on the nature of the work package-objective-measure-goal linkage. These linkages and the necessity of the work package to performance goal attainment must be made clear to all levels of reviewers, both internal and external (e.g., OMB or Congress) to the Corps. The impacts of the work package on specific areas of customer service, project performance, infrastructure investment, personnel or public safety, the local community, statutory requirements, or other considerations should be included in the funding argument, especially for packages in the Non-Deferrable and Deferrable levels. Baseline level work package funding arguments should generally remain constant from year to year; however, the funding arguments for other funding level packages are likely to need updating annually as specific work items and corresponding justifications change. All work packages in all levels should have a description and funding argument.



h. **Well-Written Descriptions and Funding Arguments.** Care should be taken to write all descriptions and funding arguments clearly and concisely so that the reader can understand and appreciate the work for which funds are being requested. Well-written justifications are essential to convince reviewers who are not familiar with the work to fund your needs.

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C-2.4. **Funding Levels.** These funding levels are as follows:

OPERATION AND MAINTENANCE, GENERAL FUNDING LEVELS		
FUNDING LEVEL	TITLE	
1	Baseline	
	Annual O&M Dredging	Annual O&M Non-Dredging
2	Non-Deferrable in the Program Year	
3	Deferrable in the Program Year	
4	Maintenance and Repair Beyond Ability (MRBA)	

The criteria for placing work packages in each Work Category Code are included in Table C-2.3. Four levels of funding have been developed for all categories of work based on varying degrees of operation and care of the Nation's capital investment in completed projects. Each work package should consist of work items from a single funding level; similar or related work items which belong in different funding levels should be submitted as separate work packages. The following are general descriptions of the four funding levels:

a. **Baseline.** Each of the following criteria must be met in order for a work item to be eligible for this level of funding:

- (1) Only the relatively fixed, non-discretionary costs of operating and maintaining Corps projects should be placed in this level.
- (2) The work must be required to provide a justified level of service at least cost.
- (3) Best business practices should be employed to achieve the best value at lowest cost.
- (4) The work is necessary to attain the established Tier II performance goal in the Program Year.
- (5) A work item must have been performed on an annual basis for at least five consecutive years to be *eligible* for baseline level funding. This does *not* mean that a work item *must* be placed in the baseline just because it has been performed five years in a row. Meeting the five-year eligibility criterion alone is not sufficient for a work item to be included in the baseline level. Each of the other criteria must be satisfied *first*. Even if the five-year criterion (as well as the other criteria) has been met, there may be circumstances where the district chooses *not* to include certain work items in the baseline. In summary, doing something five years in a row is not a "free pass" into the baseline.

(a) **Dredging.** Includes only costs of annual dredging at Corps projects. A work package for dredging is eligible for a baseline submission if dredging at the specific project is required and has been and will be performed on a regular and recurring basis. The dredging must provide a justified level of service at least cost and meet all of the other eligibility criteria described above. The costs may be either stable or vary significantly from year to year.

(b) **Non-Dredging.** Includes all other baseline work items that meet the above eligibility requirements. Baseline items include hired (in-house) and contract labor associated with the annual operation of the project and annual non-discretionary maintenance at a specific site.

Work packages for new projects coming on line or new requirements, e.g., incremental dredging for a deepened channel or operation and maintenance of a new navigation lock, can be added to the baseline by programming in the *non-deferrable in the program year* level and performing the activity for five consecutive fiscal years, at which time that work may be reviewed for inclusion in the baseline. When programming for the sixth consecutive year of performance, the work package should be reassessed to determine if it will continue to be required annually to meet all of the eligibility criteria prescribed above. If so, the work package may be moved to the baseline level, and included as a separate work package or combined with an existing work package, as appropriate. The justification for the package must identify that it is a new baseline package (or which portion of the work package represents a new baseline requirement) and why it qualifies as a baseline item. Performance in six consecutive years by itself does not qualify a package for the baseline; the package must meet all of the eligibility criteria prescribed above, i.e., no "free passes."

b. **Non-Deferrable In Program Year.** This level includes work packages of a non-annual nature, both one-time and cyclical, such as major maintenance, equipment replacement, dredging, special studies, e.g., major rehabilitation evaluation reports, dam safety reconnaissance reports, and others. This level includes cyclical maintenance items, e.g., periodic maintenance, and maintenance of floating plant. Hired (in-house) and contract labor required to perform non-deferrable work packages should be included as part of these packages. Non-deferrable work packages are for requirements which must be performed in the program year in order to provide for continued project operation at a justified level of service at least cost, and which, if not performed, result in an unacceptable risk of failure to attain the established Tier II performance goal in the Program Year. These work packages, if deferred, would result in a high probability of unsuccessful performance of the project, facility, or function, i.e., contribute to a high risk of failure to attain the established Tier II performance goal in the Program Year. Condition Indices (CI) should be used to help determine this probability, where available; for example, the repair of a lock filling valve with a low "CI" would indicate a *Non-Deferrable in the Program Year* status. This funding level includes those *Non-Deferrable In Program Year* requirements for all Work Category Codes (both operations and maintenance) which are required by Engineer Regulation, Executive Order and/or Federal law, and are performed on a non-annual basis. This includes both cyclical requirements, e.g., periodic inspections, lock de-waterings, tunnel inspections, O&M manual updates, Reservoir Regulation Manual updates, Master Plan updates, etc.; and one-time requirements, e.g., fish screen repairs, underground storage tank removal, etc. Consideration should also be given to the relative importance of the project, facility or function. Dewatering of a critical navigation lock, for example, could be determined to be *Non-Deferrable In Program Year*. Program limitations dictate taking a certain degree of risk in the non-deferrable level. However, the submissions in this level must contain all requirements necessary for projects to provide continued service in accordance with the Tier II performance goals for the PY.

c. **Deferrable in Program Year.** This level includes those O&M work packages of a non-annual nature, both one-time and cyclical, such as major maintenance, equipment replacement, dredging, special studies, and others. These work packages should be performed in the program year, and are reasonable and prudent investments, which are economically and technically justified, to preserve the integrity of the structures and ensure the future operability of the project for the justified level of service at the least cost. Delays in funding these work packages may not necessarily have an adverse impact on the operation of the project in the Program Year but may result in deterioration of project features and, consequently,

increased repair costs at the time the work is performed at some future date. Delay of these work packages is not expected to impact the accomplishment of the PY Tier II performance goals. This level also may include those work packages which will result in increased efficiencies and lowered project operating and/or maintenance costs and FTE. It also may include work packages which will result in an addition to the project's capabilities or features, thereby increasing the level of service to the public, provided it is within the scope of the project's authorized purposes and justified by the increased usage and benefits of the project. This funding level includes those *Deferrable in Program Year* requirements for all Work Category Codes (both operations and maintenance) which are required by Engineer Regulation, Executive Order and/or Federal law, and are performed on a non-annual basis. This includes both cyclical requirements, such as periodic inspections, lock de-waterings, tunnel inspections, O&M manual updates, Reservoir Regulation Manual updates, Master Plan updates, etc.; and one-time requirements, such as fish screen repairs, underground storage tank removal, etc.

d. **Maintenance and Repair Beyond the Ability of the District (MRBA).** This funding level includes those maintenance and repair work packages having a minimum cost of \$100,000, that should be performed to provide the justified level of service at least cost, but would be physically impossible for the district to accomplish during the Program Year, regardless of funding availability. MRBA also includes performance goal attainment work packages that are beyond the ability of the district. These performance goal attainment work packages will also be identified by the special interest item codes described in paragraph C-2.5. Levels 1 through 3 represent work that the District can accomplish in the PY if funded. Level 4 is for those work packages that could not be performed even if additional resources were made available.

e. **Funding Targets.** The MSC funding targets displayed in Table C-2.4 are the starting point for the development of the final program submittal that is presented to OMB and to Congress. Several adjustments are made to your program after it has been submitted to HQUSACE. These adjustments depend upon what is included in your program submittal - both within and outside of your target. MSC's should insure that every legitimate O&M need is included and properly prioritized within their program submittal so that their final program is based on the complete needs of the MSC. Current guidance from OMB places a low priority on navigational projects which carry little or no commercial traffic, citing in particular, (a) shallow draft harbors and (b) maintenance of inland waterway (IWW) projects carrying less than one billion ton-miles of commodity flow per year (<1btm). Although OMB allowed some funding for the most commercially active shallow draft Harbors and <1btm IWW projects in FY02, work packages for all others will be automatically reduced or eliminated during the HQUSACE program development process. Therefore, MSC's are advised not to place such work packages within their ceilings or baselines.

C-2.5. **Special Interest Items.** In order to highlight specific packages, the following special interest items have been defined. HQUSACE may add to or delete special interest items as needed in each Program Year. Special interest items are not additional funding levels and any given work package may fall into all, none, or any number of special interest item categories. The program reviewer may call for a WINABS report for all work packages in a special interest item category. When entering data into WINABS, you will be prompted to indicate if a work package falls into one or more of the following categories:

Special Interest Items
Performance Goal Attainment
Endangered Species Act Activities
Continuing Contract from PY-1
Major Maintenance
Dredged Material Management Plan Studies
New Recreation Facilities
Power Portion of Joint Activities in the Pacific Northwest
<u>Lewis and Clark Commemoration</u>

A description of each of these special interest items follows:

a. **Performance Goal Attainment.** This group includes operation or maintenance work packages for activities beyond the baseline level which would provide a project, having performance that is historically **and** significantly lower than the established Tier II performance goal for a specific business function, with incremental additional funding to repair, replace, or resolve the O&M problem inhibiting goal attainment. A work package of this type is to be placed in the Non-Deferrable level and should represent only the incremental additional funding requested for increased effort towards goal attainment. (Do not double-count the cost; this package should not be the sum of the differential cost and the current baseline funding requested for this work package). In some cases, the extra work required to attain a performance goal may take several years to result in goal attainment; it is expected that many “**Performance Goal Attainment**” packages will be for incremental improvements over several consecutive program years. Fiscal resources are not generally available to support 10%-20% gains in performance (e.g., availability) in a single year at any project. For example:

A multi-chamber lock has been operating at a historical availability of 83 percent for the last decade due to recurring gate arm motor system failures. In order to attain an availability goal of 95 percent, it has been determined that an additional 520 man-hours of focused preventive maintenance is required annually. A new non-deferrable WCC 60110 work package for this enhanced preventive maintenance would be flagged as a “Performance Goal Attainment” special interest item (i.e., an activity required to raise performance by 12 percent over one or more years). It would be typical to ask for 20 percent of the total extra resources (e.g., 20 percent of the 540 man-hours) in the PY, 40 percent of the total extra resources (e.g., 40 percent of the 540 man-hours) in PY+1, 60 percent in PY+2, etc. If the package is funded for five consecutive years, and is at that time assessed as a continuing requirement, and it meets all the baseline funding level criteria, then it may be moved to the baseline level and incorporated into the existing baseline WCC 60110 work package, which currently represents funding at the 83 percent performance level.

The districts and MSCs have the first-line responsibility to review and approve proposed “Performance Goal Attainment” work packages, based on their knowledge of the sources of lowered performance at a specific project. All internal efforts to resolve low performance through changes in organization, policy, management, personnel, or business processes should be investigated and tested, with verification at the district level, prior to inclusion of a “Performance Goal Attainment” work package by a project. These packages are designed to assist projects which have attempted, through acceptable business practices, all other means to attain their goal(s).

b. **Endangered Species Act Activities.** Any work functions that are to be performed in order to comply with the Endangered Species Act will be given this special interest item indicator code.

c. **Continuing Contract from PY-1.** Work packages representing contracts that will be continued from PY-1 into the PY will be given this special interest item indicator code.

d. **Major Maintenance.**

(1) **Definition.** Major maintenance is defined as a non-repetitive item of work or aggregate items of related work for which the total estimated cost exceeds \$3 million, and which does not qualify as Major Rehabilitation. This designation is not applicable to dredging, but it is applicable to dredged material disposal facilities. The related items of work should include all items required to make the work effective for its desired purpose. Optional or casually-related work which is not essential to the major maintenance item should be programmed, prioritized, and justified as a separate work package, or part of another work package, as appropriate.

(2) **Program Submission.** Supplemental justification will be included in the narrative description for each package. See paragraph 11 of the Main Text for the requirements.

e. **Dredged Material Management Plan (DMMP) Studies.**

(1) **General Requirements.** Dredged Material Management Plans (DMMPs) are developed to identify measures necessary to manage the volume of material estimated to be dredged over a twenty-year planning horizon. Study activities required to develop DMMPs for existing Federal navigation projects maintained by the Corps of Engineers, both inland and coastal, will be funded in the O&M account. All navigation projects for which maintenance dredging is expected to be required within the next ten years are eligible for the expenditure of funds for DMMP studies, subject to the following:

(a) **BY Priorities.** DMMPs will be prepared for all eligible projects on a priority basis, commensurate with the urgency and significance of impediments to continued maintenance. Requests for funding to initiate DMMP studies in the PY will be considered on a national priority basis, upon HQUSACE (CECW-O) review of submission documents. MSC's will ensure that highest priority is given to projects for which presently used disposal sites do not have sufficient capacity to accommodate disposal requirements through 20 13. DMMPs generally are not required when existing disposal sites, including confined disposal sites, have sufficient capacity to contain all material estimated to be dredged over the next twenty years, provided that there are no foreseeable impediments to use of these sites.

(b) **Non-inland-waterway Projects.** DMMPs for all projects, exclusive of those which are part of the fuel-taxed inland waterways system, will be developed in accordance with EC 1105-2-100 : Planning - Planning Guidance Notebook, Appendix E-15. Dredged Material Management Plans.

(2) **Categorization.** All costs associated with DMMP studies should be included in Work Category Code 60123. The studies should be clearly identified as "Dredged Material Management Plans" in the work package description, including the code "DMMP" as an indicator code. A Supplemental Justification Sheet in the format shown on Illustration C-2.2 shall be submitted for all projects requiring DMMPs, with a total cost (whether single-or multi-year) of \$150,000 or more. A DMMP with a total cost (whether single-or multi-year) between \$150,000 and \$500,000 , the supplemental justification sheet should be forwarded to reach the MSC by 1 June 2001. A DMMP with a total cost (whether single-or multi year) over \$500,000 the supplemental justification Sheet should be forwarded to reach HQUSACE (CECW-BC) by 1 July 2001.

~~(b) **Non-inland-waterway Projects.** DMMPs for all projects, exclusive of those which are part of the fuel-taxed inland waterways system, will be developed in accordance with Policy Guidance Letter (PGL) No. 40, Dredged Material Management Study Cost Sharing.~~

~~(2) **Categorization.** All costs associated with DMMP studies should be included in Work Category Code 60123. The studies should be clearly identified as "Dredged Material Management Plans" in the work package description, including the code "DMMP" as an indicator code. A Supplemental Justification Sheet in the format shown on Illustration C-2.2 shall be submitted for all projects requiring DMMPs, with a total cost (whether single or multi-year) of \$500,000 or more. This sheet should be forwarded to reach HQUSACE (CECW-BC) by 1 July 2000~~

~~f. **New Recreation Facilities.** Work packages related to the construction of new recreation facilities will be given this special interest item indicator code. See also Sub-appendix C-4 for information requirements associated with these packages.~~

~~g. **g. Power Portion of Joint Cost Activities in the Pacific Northwest.** Work packages for joint cost activities in the Pacific Northwest will be assigned this special interest item indicator code if the Bonneville Power Administration is not going to provide funding for the power portion in accordance with the terms of the 22 December 1997 direct funding MOA.~~

~~h. **Lewis and Clark Commemoration.** The bicentennial commemoration of the Lewis and Clark Corps of Discovery Expedition (2003-2006) is rapidly approaching. The commemoration includes not only the "St. Louis and points west" that many seem to expect, but also includes all of the Ohio River basin, as well as historically-significant sites in the mid-Atlantic and New England states. Because the Corps manages much of the land along the route used by Lewis and Clark during their historic expedition, many plans are being made that will directly involve the Corps. Visitation is expected to increase with some areas experiencing a larger increase than others do and we must be ready to accommodate it.~~

~~It is imperative that all efforts specifically related to the four commemoration goals (to accommodate increased visitation, provide information on the Corps and Army, maintain safe conditions for the visitor, and minimize the impact on natural and cultural resources) be identified without need for frequent data calls. Only in this fashion can they be given the appropriate level of priority, and the many requests for information on this effort be satisfied.~~

**C-2.6. Operation and Maintenance Backlog Reporting Requirements.** District and MSC offices are encouraged to develop complete operation and maintenance programs so that they might better anticipate future program management requirements. It is important that *all* justified requirements funded or unfunded, be identified, so that in the event that additional resources are made available for infrastructure preservation, appropriate funding prioritization decisions can be made about work packages which may originally have appeared to be below the funding level. . Identification of backlog is critical in order to understand and quantify the condition of the water resources infrastructure, and the quality of associated services. It is equally important that the identified backlog be a realistic assessment of requirements, and not a "wish list" of nice-to-have enhancements.

a. **Backlog.** Backlog is defined as those operation and unfunded maintenance work items which are required and should have been funded by the PY in order to provide reasonable assurance that project performance goals can continue to be met. Backlog may occur in any line of business and is not limited to infrastructure-related work packages. Deferred maintenance of a project feature or deferred update of a project exhibit for instance, may both be valid examples of backlog. Total backlog is the sum of backlog from all WCCs and at all program funding levels. The following items, however, are excluded from backlog:

(1) Additions;

- (2) Efficiency improvements;
- (3) Maintenance or repair ahead of schedule or prior to demonstrated need or deficiency;
- (4) WCCs 61X51 and 61X52 (real estate management activities);
- (5) Maintenance of non-Corps facilities (however, maintenance of dredged material disposal sites on non-Corps property *should be* included);

b. **Critical Backlog.** Work packages which are included in the program at the nondeferrable level but are not funded are designated as critical backlog. Critical backlog is also a component of total backlog.

#### C-2.7. Cost Estimates.

a. **Projections.** Field offices will compute costs based on PY-1 cost projections. All cost estimates will be projected to levels based on inflation factors and assumptions provided in the main part of this EC.

b. **Rounding.** All cost estimates shall be rounded to the nearest one thousand dollars (\$1000). Because of serious complications in aggregating functional, regional and national summaries, it is imperative that everyone at all levels strictly adhere to this requirement without exception.

#### C-2.8. Rank Assignments.

a. **Work Groupings.** The smallest increment of work for O&M programming purposes is a work item or task. Examples of tasks are trash pickup at a recreation area, mowing a levee, or painting a lock gate. In the program system, these tasks may be grouped into work packages by Work Category Codes to represent general areas of work such as maintenance of 15 of 30 recreation sites during May through September or painting lock gates at locks 1-4. Work packages also represent the criticality and relative importance of the work. For example, the relatively fixed, non-discretionary costs of operating and maintaining a major commercial navigation lock would be included in the baseline level work package, while non-annual or one-time maintenance would be placed in lower (non-deferrable or deferrable) level work packages. Funding levels are grouped by Work Category Code, as shown in Table C-2. The final grouping of the hierarchy is the project level. All work must be authorized in specific projects.

b. **Rankings.** Tasks at projects will be developed to describe the funding requirement for each project and will not be aggregated at a higher level than that provided by the funding level descriptions. Tasks should be organized into the various funding levels in accordance with the level descriptions for various categories of work outlined in Table C-2.3. For simplicity, only individual tasks or a collection of related equivalent-priority tasks within a category at a level that can be considered one discrete element are defined as a work package. A work package can be a single task or group of related and equivalent-priority tasks, encompassing both primary and supporting costs, by definition. In order to minimize data entry, districts are requested to consolidate equivalent baseline level tasks that are performed on a routine basis each year. Priorities will be assigned to each work package. Ranking of individual work packages will be assigned by the district and MSC within each level. No ranking across levels is allowed; e.g., all baseline work packages will be ranked higher than the highest-ranked *non-deferrable in the program year* package. To better ensure appropriate rank, work packages will contain a code indicating the funding level where the activity belongs. For example, a dredging activity that meets the definition for the *non-deferrable in the program year* level should be given the funding level code "2".

c. **Preliminary Rankings.** An automatic rank assignment program is a feature of WINABS that can be used as a preliminary step to initiate the MSC ranking process. However, MSC's are cautioned not to

use this feature for final rank assignments. This feature is entirely optional and its use is at the discretion of the individual field office. It is not intended to supplant the decision-making process of the organization.

d. **Final Rankings.** Development of final rankings should be an iterative process that employs all the knowledge and support tools available to the decision maker. In developing the national program, HQUSACE will generally rely on the final rankings assigned by the MSC, provided they meet the funding level definitions and overall policy. It is therefore important that rank assignments be made in accordance with the relative importance of the work so as to ensure that the highest priority activities can be accomplished within available resource limits. Ranking of work items within the *non-deferrable in the program year* and deferrable levels will follow the priorities for operation and maintenance work items as discussed in Paragraph C-2.2. To preserve the integrity of the program process, it is essential that districts and MSCs adhere strictly to the funding level definitions presented in Paragraph C-2.4. Artificial assignment of funding levels to individual work packages (e.g., using the program target as the automatic line of demarcation between the non-deferrable and deferrable levels) is not acceptable; each work package should be assigned to the appropriate funding level based on consistent and objective application of the funding level definitions.

#### C-2.9. **Condition Indices (CI's).**

a. CI's are an important management tool that, coupled with other decision-making criteria, can help to optimize the effective use of limited resources. CI's are numerical indicators of the condition of equipment and structures that provide a quantitative and consistent means of describing their condition. They enhance our ability to establish priorities and to justify maintenance requirements. Further information on CI's, and their relationship to maintenance management systems in general, can be found in various publications issued in connection with the *Repair Evaluation, Maintenance and Rehabilitation (REMR) Research Program*.

b. Technical notes are available from the Waterways Experiment Station (WES) that explain the procedures for determining CI's on structures for which a CI methodology have been developed. Copies of these publications may be obtained from (WES).

c. CI procedures have been developed at the individual component level, (e.g., a miter lock gate, steel sheet pile structure, etc.). This generally lends itself to the work packages used to describe maintenance requirements in the Windows - Automated Program System (WINABS). Therefore, a CI may be entered for each work package record for which a CI procedure has been developed. This is not mandatory, but it will help to strengthen the justification for funding if the CI is identified in the funding argument.

C-2.10. **Five-year Program.** To assist districts in preparing their future work program and reducing backlog, a methodology has been developed that establishes a five-year horizon for planning purposes. This methodology is optional and is presented here as a tool that can be used at the discretion of the district. The district has the latitude to use this methodology, variations of it, or other methods to aid in the goal to reduce the backlog. Five-year programs for the PY and four years following the program year (PY+1, PY+2, PY+3 and PY+4) should be developed so as to have a realistic mid-range plan for the accomplishment of large backlog work packages as illustrated in the diagram on the following page. After estimating the amount of anticipated funding available, specific PY backlog work packages are scheduled in the out-years. Districts can overprogram by three percent of anticipated total funding in order to plan for the accomplishment of additional work packages should funding become available, however, each



subsequent year's schedule is prepared under the assumption that only the funded portion would actually be accomplished in any year. In this way the benefits of planning for what could be accomplished in the event of additional funding can be derived without distorting the latter years of the five-year program. The objective is to systematically reduce backlog in an efficient manner by extending the detailed planning horizon for accomplishing large backlog work packages beyond the PY program in accordance with the guidance presented below.

a. **Five-year Funding Estimation.** Funding estimates (in PY dollars) can be prepared for each of the categories presented below using the worksheet shown in Illustration C-2.3:

(1) **Total Funded Amount.** This represents the total O&M funding anticipated for the PY and each of the four out-years. Total funding will be estimated by applying the following factors to the total funded amount in the MSC program submittal for the PY:

YEAR	FACTOR
PY+1	0.98
PY+2	0.96
PY+3	0.94
PY+4	0.92

(2) **Baseline.** This includes the baseline funding requirements for the PY adjusted for specific reductions or new baseline requirements that are anticipated to occur each year through PY+4.

(3) **Cyclic.** This includes the specific cyclic work scheduled each year through PY+4, including periodic inspections, periodic maintenance, etc.

Items (4) and (5) may be estimated using district and MSC discretion, however, a five-year moving average is recommended as an initial estimating methodology.

(4) **Continuing Contracts.** This amount represents the amount of continuing contracts funded each year through PY+4.

(5) **New Requirements.** This category simply represents the portion of each year's funded program through PY+4 for work packages that were not included in the previous year's program submittal. A comparison of the PY submittal to the PY-1 submittal should be performed in order to identify the amount of new requirements in the PY submittal. This includes work items which were first identified since the previous year's program submittal was prepared (e.g., as the result of an inspection) and that are of high-enough priority to be included in the subsequent year's funded program. (This does not include emergency requirements which are funded via reprogramming as they occur). This category also includes work items for which the demonstrated need or deficiency was not adequate to be a justified work package in the previous year's submittal, but which have deteriorated, or increased in program priority, during the course of the year since the previous PY submittal to the point that they merit funding in the subsequent PY submittal.

(6) **Funded Backlog.** This represents the amount of discretionary funding anticipated to be available to fund PY backlog work packages each year through PY+4. This amount is calculated by subtracting Items (2) through (5) from Item (1) above. (A negative number may result, indicating that no funds are available to fund PY Backlog items in this out-year).

(7) **Overprogrammed Backlog (Three Percent of Total Funding or \$1 Million).** Districts and MSCs will be allowed to overprogram by an amount equal to three percent of the estimated funded program (from Item 1 above), or \$1 million, whichever is greater, in each year through PY+4.

(8) **Total Scheduled Backlog.** The total amount available for scheduling backlog work packages equals the funded amount calculated for Item 6 plus the overprogrammed amount calculated in Item (7) above.

b. **Five-year Backlog Program Preparation.** The five-year program can be prepared by districts and MSC's using the schedule format displayed in Illustration C-2.4. A separate schedule should be prepared for each year through PY+4. Each schedule should be completed in accordance with the following guidance.

(1) The totals for Items (1) through (5) for PY+1 from the Worksheet for Five-year Program (shown in Illustration C-2.3 and described in C.2.11.a above) will be entered in Lines 1 through 5 of the Five-year Backlog Program for PY+1. A subtotal for Lines 2 through 5 is then calculated.

(2) Backlog work packages from the PY submittal will be scheduled in Line 6 in order of priority until no additional backlog work packages can be funded within the PY+1 "Funded Backlog" total (calculated in Line 6 of the funding estimation worksheet). Individual funded backlog work packages of \$100,000 or greater will be entered as separate line items in order of priority starting with Line 6a. Individual funded backlog work packages that are less than \$100,000 will be totaled and entered as a single "Funded Backlog Packages less than \$100,000" line item. The sum of all funded backlog work packages will be entered as the "Total Funded Backlog Packages" for Line 6. (This represents the amount by which the PY backlog can be reduced if the district/MSD receives the total O&M funding anticipated for PY+1). The sum of Lines 2 through 6 should be equal to, or slightly less than, the "FUNDED TOTAL" shown in Line 1.

(3) Overprogrammed backlog work packages from the PY submittal will be scheduled in Line 7 in order of priority, starting with the first backlog package following Step (2) above, until no additional backlog work packages can be funded within the PY+1 "Overprogrammed Backlog" total (calculated in Line 7 of the funding estimation worksheet). Again, individual funded backlog work packages of \$100,000 or greater will be entered as separate line items in order of priority starting with Line 7a. Individual funded backlog work packages that are less than \$100,000 will be totaled and entered as a single "Overprogrammed Backlog Packages less than \$100,000" line item. (This represents the amount by which the PY Backlog could be further reduced if the district/MSD were to receive an additional three percent in total funding). The sum of all overprogrammed backlog work packages will be entered as the "Total Overprogrammed Backlog Packages" for Line 7. The total (funded and overprogrammed) scheduled backlog in PY+1 will be entered as the "Total Scheduled Backlog" in Line 8, and should be equal to, or slightly less than, the "Total Scheduled Backlog" amount calculated in Line 8 of the funding estimation worksheet for PY+1.

(4) Steps (1) through (3) above will be repeated to complete the PY+2 and PY+3 Five-year Program Schedules, with the following exception. In preparing the Funded Backlog portion of the schedule for PY+2, for example, the first overprogrammed package from Line 7 of the PY+1 Schedule becomes the first package scheduled in Line 6 of the PY+2 Schedule.

**C-2.11. Navigation Projects.** Beginning in FY 1987, all shallow-draft harbors previously financed as a part of a through-waterway in the inland river systems were, and will continue to be, programmed as separate projects. These projects include all activities on each spur or side channel of the old project and exclude only those activities on the main through channel. For the PY when additional projects are identified, districts should call HQUSACE (CECW-O) for a PWID number, if needed.

**C-2.12. Marginal Projects.** For projects, or segments of projects, that have marginal benefits, special care should be taken to ensure that all resource requests are economically justified. If sufficient study detail is not yet available to develop appropriate funding recommendations, program requests should be held to levels at or, preferably, below historic amounts. Major repairs not essential to structural integrity in the PY should be postponed. Operation activities should be constrained to the lowest level possible but should avoid extreme, adverse impacts on project users.

**C-2.13. Evaluation Reports.** Reconnaissance and / or Evaluation Reports for deficiency correction, reconstruction, dredged material disposal facilities, Major Rehabilitation and Dam Safety Assurance are to be funded under the O&M account. See Sub-appendix B-2, for additional guidance regarding the Major Rehabilitation and Dam Safety Assurance Programs. Guidance for resourcing pre-construction E&D is as follows:

a. **Major Rehabilitation Program.** After the Evaluation Report has been approved, pre-construction E&D may be included in the Construction, General (CG) program request at the earliest opportunity. Until such program request can be made and funds appropriated under CG, field offices may program O&M funds to perform E&D.

b. **Dam Safety Assurance Program.** See Appendix B for information on resourcing.

**C-2.14. Cultural Resources.** Funding requirements for activities to ensure compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) (PL 101-601) should not be included in program submittal. Specific guidance will be provided at a later date by the Mandatory Center of Expertise (MCX) on how and when to make requests for funding of activities to ensure compliance with NAGPRA. All of the requirements will be aggregated by the MCX into the program as a separate line item. ~~on how and when to make requests for funding of activities to ensure compliance with the NAGPRA. This is a result of the creation of the Mandatory Center of Expertise (MCX) to handle NAGPRA compliance and curation of cultural resources. All of the requirements will be aggregated by HQUSACE (CECW-O) into the program as a separate line item.~~ All curation costs, other than NAGPRA, should be included in the appropriate Work Category Code,

**C-2.15. Special Recreation Use Fees (SRUF).** Funds generated from collecting recreation use fees are returned in O&M, General appropriations for operation, maintenance and improvement of recreation sites and facilities. The construction of new recreation facilities or renovation and/or improvement of existing facilities may be accomplished with these funds if the goal of providing quality public recreation experiences with the most cost efficient management of water resource development projects can be met. Overall budgetary limitations should be carefully considered in determining what activities will be financed with these funds. Routine operation and maintenance of existing sites and facilities should not be compromised to finance new construction or facility improvements. SRUF funded work previously programmed in WCC 60512 and 61512 should now be programmed in WCC 60511 and 61511.

**C-2.16. Challenge Partnerships (Challenge Cost Share).** Challenge partnerships are opportunities for public and non-Federal groups and individuals to contribute to and participate in the operation and/or maintenance of recreation facilities and natural resources at Corps projects. These opportunities may consist of identification, protection, improvement, rehabilitation, preservation, management, or interpretation of natural resources, environmental features, recreation areas and facilities, or cultural resources. Challenge Partnering with others provides a way to leverage the Corps program by sharing the cost of operation and/or managing recreation facilities and natural resources. Policy guidance for the Challenge Partnership program is contained in ER 1130-2-500, Chapter 12.

**C-2.17. On-Board Review.** HQUSACE (CECW-BC) may conduct an on-board review in early July. MSC's will be selected at random. Any selected MSC's will be asked to explain the overall priorities used in developing the program request, along with an in-depth examination of work packages on selected projects. Any selected MSC will be notified in June.

**C-2.18. Narrative and Supporting Data.**

**a. Justification of Estimates.**

**Congressional Submission.** Each MSC shall prepare and submit *Justification of Estimate* sheets based on amounts provided by CECW-OM for the project, using the format in Illustration C-2.5, in final form. To avoid illogical precision, no amounts should be rounded to less than \$1,000, using the 5/4 rule. This is a widely read document. To preclude misinterpretations by Congressional and other reviewers, do not use vague, stereotyped, descriptions in the Reason for Change and Maintenance Item column. Standard phraseology is acceptable, if used judiciously, such that the descriptions are clear and understandable to the reader. Be as specific as possible using a condensed version of what the testifying officer would answer if asked by the Sub-Committee the reason for changes from prior year. The tone of statements must reflect a full support of the President's Program request with no hints that amounts may not be adequate. Accordingly, a remark explaining higher amounts is preferable. The typed material in the body will be confined to 6 1/2 inches vertically and 10 inches horizontally, leaving 1/2 inch margins on the left and right sides and 0.607 inch margins at the top and bottom of an 11 X 8-1/2 inch page size. Justification sheets must be submitted as Microsoft Word documents over the Corps Mail Network or by computer diskettes. ASCII format is not acceptable because it deletes control codes for formatting. In addition, Project status maps are required for all Major Rehabilitation work that is still being funded under the O&M, General, appropriation.

To avoid allocation problems associated with roll-ups, projects spanning more than one district should be entered separately with titles showing the district name, for example:

OHIO RIVER LOCKS AND DAMS, PA (Pittsburgh Dist.)  
OHIO RIVER LOCKS AND DAMS, WV (Huntington Dist.)  
OHIO RIVER LOCKS AND DAMS, KY, IL, IN, OH, & WV (Louisville Dist.)

(Other projects include Ohio River Open Channel Work, McClellan Kerr, Missouri River and the Upper Mississippi River or district-wide activities such as Inspection of Completed Works or Scheduling Reservoir Activities) If a state is included in more than one district, only the primary district should show that state in the title.

**Single State Designation for Inspection of Completed Works (ICW), Project Condition Surveys (PCS), Scheduling Reservoir Operations (SRO) and Surveillance of Northern Boundary Waters (SNBW).** Each of these programs shall be represented by a single work package per district. In those cases where these programs are performed in more than one state, the district shall designate a primary state and include all costs under that single primary state.

**C-2.19. Additional Information**

**a. Database System.** The CEAP WPC21 processor in Portland, OR will be used to submit data to the automated O&M program system.

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b. **Correction of Program Submittals.** As in past years, districts and MSCs will be asked to make any necessary corrections through automated program systems after HQUSACE review. If a district or MSC is asked to make corrections, the data base will be reopened to allow access for updating.

c. **Points of Contact.**

<u>Question(s) Referring To</u>	<u>Office</u>	<u>Telephone</u>
Policies, procedures, or format of the Project O&M activity.	CECW-BC	202-761- <u>4130</u> fax 202-761- <u>4370</u>
ADP input for the same activity	CECW-B A	202-761 <u>4215</u> fax 202-761- <u>5295</u>
Programs Management staff coordination of Congressional submission of the O&M program.	CECW-BC	202-761- <u>4130</u> fax 202-761- <u>4370</u> (e-mail preferred)
Curation\Native American Graves Protection Act (NAGPRA)	CECW-ON	202-761- <u>4827</u>
Condition Indices guidance. Technical notes.	CEWS-SC-A	601-634-2585 fax 601-634-2873

C-2.20. **Submission Requirements.** Submission time schedules for automated data and hard copies are listed in Paragraph 11 of the main text.

<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
601-- <sup>1/</sup>	Operation for Navigation Functions
60110 **	Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Navigation
60120 <sup>1/</sup>	Studies and Surveys for Navigation
60121 *	Studies and Surveys
60122	Major Rehabilitation Evaluation Reports
60123	Environmental Studies and Monitoring for Dredging Purposes
60130 <sup>1/</sup>	Dam Safety for Navigation
60131 **	Instrumentation, Data Collection and Analysis
60132 *	Formal Periodic Inspections and Reports
60133	Dam Safety Assurance Studies
60140 <sup>1/</sup>	Water Management (Control and Quality) Activities for Navigation
60141	Water Management (Control and Quality) Activities - Analysis and Studies for Navigation
60142	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Navigation
60150 *	Real Estate Management for Navigation
60160	Environmental Compliance Management for Navigation
602-- <sup>1/</sup>	Operation for Flood Damage Reduction Functions
60210 **	Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Flood Damage Reduction
60220 <sup>1/</sup>	Studies and Surveys for Flood Damage Reduction
60221	Studies and Surveys
60222	Major Rehabilitation Evaluation Reports
60223 *	Inspections of Completed Works - Local Protection Projects
60230 <sup>1/</sup>	Dam Safety for Flood Damage Reduction
60231 **	Instrumentation, Data Collection and Analysis
60232 *	Formal Periodic Inspections and Reports
60233	Dam Safety Assurance Studies
60240 <sup>1/</sup>	Water Management (Control and Quality) Activities for Flood Damage Reduction
60241	Water Management (Control and Quality) Activities - Analysis and Studies for Flood Damage Reduction
60242	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Flood Damage Reduction
60250 *	Real Estate Management for Flood Damage Reduction

<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60260	Environmental Compliance Management for Flood Damage Reduction
603-- <sup>1/</sup>	Operation for Hydropower Functions
60310 <sup>1/</sup>	Operation of Dams, Power Plants, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
60311**	Operations - Supervision and Engineering
60312**	Hydraulic Expenses
60313**	Electric Expenses
60314**	Miscellaneous Hydraulic Power Generation Expenses
60320 <sup>1/</sup>	Studies and Surveys for Hydropower
60321	Studies and Surveys - Supervision and Engineering
60322	Studies and Surveys - Hydraulic Expenses
60323	Studies and Surveys - Electric Expenses
60324	Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses
60325	Major Rehabilitation Evaluation Reports
60330 <sup>1/</sup>	Dam Safety for Hydropower
60331**	Instrumentation, Data Collection and Analysis
60332*	Formal Periodic Inspections and Reports
60333	Dam Safety Assurance Studies
60340 <sup>1/</sup>	Water Management (Control and Quality) Activities for Hydropower
60341	Water Management (Control and Quality) Activities - Analysis and Studies for Hydropower
60342	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Hydropower
60350*	Real Estate Management for Hydropower
60360	Environmental Compliance Management for Hydropower
604-- <sup>1/</sup>	Operation for Environmental Stewardship Functions
60410 <sup>1/</sup>	Operation for Environmental Stewardship
60411	Management of Natural Resources
60412	Management and Curation of Archeological and Cultural Resources
60413	Management of Wildlife Mitigation Features
60414	Fisheries Management - Operation of Fish Hatcheries
60415	Fisheries Management - Fish Hauling Activities and Fish Passage

<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
	Structures
60416	Comprehensive Master Plans
60420	Studies and Surveys for Environmental Stewardship
60430	Reserved
60440 <sup>1/</sup>	Water Management (Control and Quality) Activities for Environmental Stewardship
60441	Water Management (Control and Quality) Activities - Analysis and Studies for Environmental Stewardship
60442	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Environmental Stewardship
60450*	Real Estate Management for Environmental Stewardship
60460	Environmental Compliance Management for Environmental Stewardship
605-- <sup>1/</sup>	Operation for Recreation Functions
60510 <sup>1/</sup>	Operation for Recreation
60511**	Operation/management of Recreation Areas/facilities, Visitor Centers, Reservoirs, Service Facilities and Equipment, Etc. for Recreation
60513	Law Enforcement - Costs and Supervision of Law Enforcement Agreements
60520	Studies and Surveys for Recreation
60530	Reserved
60540 <sup>1/</sup>	Water Management (Control and Quality) Activities for Recreation
60541	Water Management (Control and Quality) Activities - Analysis and Studies for Recreation
60542	Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Recreation
60550*	Real Estate Management for Recreation
60560	Environmental Compliance Management for Recreation
606-- <sup>1/</sup>	Joint Activities for Operations
60610**	Joint Costs for Operations Activities
60620 <sup>1/</sup>	Joint Costs for Studies and Surveys
60621*	Joint Costs for Studies and Surveys
60622	Joint Costs for Major Rehabilitation Evaluation Reports
60630 <sup>1/</sup>	Joint Costs for Dam Safety Activities
60631**	Joint Costs for Instrumentation, Data Collection and Analysis
60632*	Joint Costs for Formal Periodic Inspections and Reports



<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
60633	Joint Costs for Dam Safety Assurance Studies
60640 <sup>1/</sup>	Joint Costs for Water Management (Control and Quality) Activities
60641	Joint Costs for Water Management (Control and Quality) Activities – Analysis and Studies
60642	Joint Costs for Water Management (Control and Quality) Activities – Operation of Water Control Data Systems
60650*	Joint Costs for Real Estate Management Activities
60660	Joint Costs for Environmental Compliance Management Activities
60710 <sup>1/</sup>	National Emergency Preparedness Program (NEPP)
60711	NEPP Continuity of Operations
60712	NEPP National Preparedness Planning
60713	NEPP Support of Emergency Ops Ctrs
60714	NEPP Emergency Water Program
60715	NEPP Continuity of Government
60716	NEPP Training and Exercises
611-- <sup>1/</sup>	Maintenance for Navigation Functions
61110	Maintenance of Locks, Dams, Reservoirs, Levees, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Navigation
61120 <sup>1/</sup>	Dredging for Navigation
61121	Dredging Activities for Navigation
61122	Construction and Maintenance of Dredged Material Disposal Facilities for Navigation
61130	Reserved
61140	Purchase/maintenance of Water Management (Control and Quality) Equipment for Navigation
61150 <sup>1/</sup>	Real Estate for Navigation
61151	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Navigation
61152	Resolution of Real Estate Encroachments for Navigation
61153	Boundary Monumentation and Rectification for Navigation
61160	Environmental Compliance (Remedial Actions) for Navigation
61170	Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Navigation
612-- <sup>1/</sup>	Maintenance for Flood Damage Reduction Functions

<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
61210 <sup>1/</sup>	Maintenance for Flood Damage Reduction
61211	Maintenance of Dams, Reservoirs, Other Structures, Service Facilities, permanent Operating Equipment, Etc. for Flood Damage Reduction
61212	Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for the Mississippi River and Tributaries (MR&T)
61220 <sup>1/</sup>	Dredging for Flood Damage Reduction
61221	Dredging Activities for Flood Damage Reduction
61222	Construction and Maintenance of Dredged Material Disposal Facilities for Flood Damage Reduction
61230	Reserved
61240	Purchase/maintenance of Water Management (Control and Quality) Equipment for Flood Damage Reduction
61250 <sup>1/</sup>	Real Estate for Flood Damage Reduction
61251	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Flood Damage Reduction
61252	Resolution of Real Estate Encroachments for Flood Damage Reduction
61253	Boundary Monumentation and Rectification for Flood Damage Reduction
61260	Environmental Compliance (Remedial Actions) for Flood Damage Reduction
613-- <sup>1/</sup>	Maintenance for Hydropower Functions
61310 <sup>1/</sup>	Baseline Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
61311	Baseline Maintenance Supervision for Hydropower
61312	Baseline Maintenance of Hydraulic Structures for Hydropower
61313	Baseline Maintenance of Electric Plant for Hydropower
61314	Baseline Maintenance of Miscellaneous Hydraulic Plant for Hydropower
613n0 <sup>1/</sup>	Non-baseline Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower
613n1	Non-baseline Maintenance Supervision for Hydropower
613n2	Non-baseline Maintenance of Hydraulic Structures for Hydropower
613n3	Non-baseline Maintenance of Electric Plant for Hydropower

<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
613n4	Non-baseline Maintenance of Miscellaneous Hydraulic Plant for Hydropower
61320	Dredging Activities for Hydropower
61330	Reserved
61340	Purchase/maintenance of Water Management (Control and Quality) Equipment for Hydropower
61350 <sup>1/</sup>	Real Estate for Hydropower
61351	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Hydropower
61352	Resolution of Real Estate Encroachments for Hydropower
61353	Boundary Monumentation and Rectification for Hydropower
61360	Environmental Compliance (Remedial Actions) for Hydropower
61370 <sup>1/</sup>	Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Hydropower
61371	Comprehensive Replacement Supervision
61372	Comprehensive Replacement of Structures
61373	Comprehensive Replacement of Electric Plant
61374	Comprehensive Replacement of Miscellaneous Hydraulic Plant
614-- <sup>1/</sup>	Maintenance for Environmental Stewardship Functions
61410 <sup>1/</sup>	Maintenance for Environmental Stewardship
61411	Maintenance of Natural Resources Facilities
61412	Mitigation of Archeological and Cultural Resources
61413	Maintenance of Wildlife Mitigation Features
61414	Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures
61420 <sup>1/</sup>	Dredging for Environmental Stewardship
61421	Dredging Activities for Environmental Stewardship
61422	Construction and Maintenance of Dredged Material Disposal Facilities for Environmental Stewardship
61430	Reserved
61440	Purchase/maintenance of Water Management Equipment (Control and Quality) for Environmental Stewardship
61450 <sup>1/</sup>	Real Estate for Environmental Stewardship
61451	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Environmental Stewardship

<b>TABLE C-2.1</b> <b>WORK CATEGORY CODES - NUMERICALLY ORDERED</b> (See footnotes at end of Table)	
WORK CATEGORY CODE	DESCRIPTION
61452	Resolution of Real Estate Encroachments for Environmental Stewardship
61453	Boundary Monumentation and Rectification for Environmental Stewardship
61460	Environmental Compliance (Remedial Actions) for Environmental Stewardship Features
615-- <sup>1/</sup>	Maintenance for Recreation Functions
61510 <sup>1/</sup>	Maintenance for Recreation
61511	Maintenance of Recreation Facilities, Visitor Centers, Other Operating Equipment, Etc.
61513	Cost Shared Recreation Developments
61520	Dredging Activities for Recreation
61530	Reserved
61540	Purchase/maintenance of Water Management Equipment (Control and Quality) for Recreation
61550 <sup>1/</sup>	Real Estate for Recreation
61551	Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Recreation
61552	Resolution of Real Estate Encroachments for Recreation
61553	Boundary Monumentation and Rectification for Recreation
61560	Environmental Compliance (Remedial Actions) for Recreation
616-- <sup>1/</sup>	Joint Activities for Maintenance
61610	Joint Costs for Maintenance Activities Excluding Dredging
61620 <sup>1/</sup>	Joint Costs for Dredging
61621	Joint Costs for Dredging Activities
61622	Joint Costs for Construction and Maintenance of Dredged Material Disposal Facilities
61630	Reserved
61640	Joint Costs for Water Management Equipment Activities

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61650 <sup>1/</sup>	Joint Costs for Real Estate Activities
61651	Joint Costs for Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits
61652	Joint Costs for Resolution of Real Estate Encroachments
61653	Joint Costs for Boundary Monumentation and Rectification
61660	Joint Costs for Environmental Compliance (Remedial Actions) Activities

1/ SUMMARY COST ACCOUNT/WORK CATEGORY - COSTS MAY NOT BE CHARGED DIRECTLY TO THESE ACCOUNTS.

\*Feature Cost Codes marked with an asterisk require added data in project work description, justification statement, or output measures. See Table C-2.5.

\*\*Although Feature Cost Codes marked with double asterisk require no description or funding argument, requested resources will be in consonance with funding level definition and prior year experience.

**TABLE C-2.2**  
**WORK CATEGORY CODES - ALPHABETICALLY ORDERED**

DESCRIPTION	WORK CATEGORY CODE
Baseline Maintenance Supervision for Hydropower	61311
Baseline Maintenance of Miscellaneous Hydraulic Plant for Hydropower	61314
Baseline Maintenance of Electric Plant for Hydropower	61313
Baseline Maintenance of Hydraulic Structures for Hydropower	61312
Baseline Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	61310 <sup>1/</sup>
Boundary Monumentation and Rectification for Hydropower	61353
Boundary Monumentation and Rectification for Navigation	61153
Boundary Monumentation and Rectification for Environmental Stewardship	61453
Boundary Monumentation and Rectification for Flood Damage Reduction	61253
Boundary Monumentation and Rectification for Recreation	61553
Comprehensive Replacement of Miscellaneous Hydraulic Plant	61374
Comprehensive Replacement Supervision	61371
Comprehensive Replacement of Electric Plant	61373
Comprehensive Replacement of Structures	61372
Comprehensive Master Plans	60416
Construction and Maintenance of Dredged Material Disposal Facilities for Flood Damage Reduction	61222
Construction and Maintenance of Dredged Material Disposal Facilities for Environmental Stewardship	61422
Construction and Maintenance of Dredged Material Disposal Facilities for Navigation	61122
Cost Shared Recreation Developments	61513
Dam Safety for Hydropower	60330 <sup>1/</sup>
Dam Safety Assurance Studies	60333
Dam Safety for Flood Damage Reduction	60230 <sup>1/</sup>

<b>TABLE C-2.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Dam Safety for Navigation	60130 <sup>1/</sup>
Dam Safety Assurance Studies	60133
Dam Safety Assurance Studies	60233
Dredging Activities for Flood Damage Reduction	61221
Dredging Activities for Environmental Stewardship	61421
Dredging Activities for Recreation	61520
Dredging for Flood Damage Reduction	61220 <sup>1/</sup>
Dredging Activities for Navigation	61121
Dredging for Environmental Stewardship	61420 <sup>1/</sup>
Dredging Activities for Hydropower	61320
Dredging for Navigation	61120 <sup>1/</sup>
Electric Expenses	60313**
Environmental Compliance Management for Flood Damage Reduction	60260
Environmental Compliance (Remedial Actions) for Recreation	61560
Environmental Compliance (Remedial Actions) for Navigation	61160
Environmental Compliance Management for Navigation	60160
Environmental Compliance (Remedial Actions) for Flood Damage Reduction	61260
Environmental Compliance (Remedial Actions) for Hydropower	61360
Environmental Studies and Monitoring for Dredging Purposes	60123
Environmental Compliance Management for Recreation	60560
Environmental Compliance Management for Hydropower	60360
Environmental Compliance Management for Environmental Stewardship	60460
Environmental Compliance (Remedial Actions) for Environmental Stewardship Features	61460
Fisheries Management - Operation of Fish Hatcheries	60414

<b>TABLE C-2.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Fisheries Management - Fish Hauling Activities and Fish Passage Structures	60415
Formal Periodic Inspections and Reports	60232*
Formal Periodic Inspections and Reports	60332*
Formal Periodic Inspections and Reports	60132*
Hydraulic Expenses	60312**
Inspections of Completed Works - Local Protection Projects	60223*
Instrumentation, Data Collection and Analysis	60131**
Instrumentation, Data Collection and Analysis	60231**
Instrumentation, Data Collection and Analysis	60331**
Joint Costs for Dredging	61620 <sup>1/</sup>
Joint Costs for Dredging Activities	61621
Joint Costs for Construction and Maintenance of Dredged Material Disposal Facilities	61622
Joint Activities for Maintenance	616-- <sup>1/</sup>
Joint Costs for Maintenance Activities Excluding Dredging	61610
Joint Costs for Water Management Equipment Activities	61640
Joint Costs for Studies and Surveys	60621*
Joint Costs for Environmental Compliance (Remedial Actions) Activities	61660
Joint Costs for Boundary Monumentation and Rectification	61653
Joint Costs for Environmental Compliance Management Activities	60660
Joint Costs for Real Estate Management Activities	60650*
Joint Costs for Real Estate Activities	61650 <sup>1/</sup>
Joint Costs for Studies and Surveys	60620 <sup>1/</sup>
Joint Costs for Water Management (Control and Quality) Activities - Operation of Water Control Data Systems	60642



<b>TABLE C-2.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Joint Costs for Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits	61651
Joint Costs for Water Management (Control and Quality) Activities - Analysis and Studies	60641
Joint Costs for Water Management (Control and Quality) Activities	60640 <sup>1/</sup>
Joint Costs for Dam Safety Assurance Studies	60633
Joint Costs for Formal Periodic Inspections and Reports	60632*
Joint Costs for Instrumentation, Data Collection and Analysis	60631**
Joint Costs for Resolution of Real Estate Encroachments	61652
Joint Costs for Dam Safety Activities	60630 <sup>1/</sup>
Joint Costs for Major Rehabilitation Evaluation Reports	60622
Joint Activities for Operations	606-- <sup>1/</sup>
Joint Costs for Operations Activities	60610**
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Flood Damage Reduction	61251
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Environmental Stewardship	61451
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Navigation	61151
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Recreation	61551
Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for Hydropower	61351
Law Enforcement - Costs and Supervision of Law Enforcement Agreements	60513
Maintenance of Natural Resources Facilities	61411
Maintenance for Environmental Stewardship	61410 <sup>1/</sup>
Maintenance for Environmental Stewardship Functions	614-- <sup>1/</sup>

**TABLE C-2.2**  
**WORK CATEGORY CODES - ALPHABETICALLY ORDERED**

DESCRIPTION	WORK CATEGORY CODE
Maintenance for Hydropower Functions	613-- <sup>1/</sup>
Maintenance for Recreation Functions	615-- <sup>1/</sup>
Maintenance of Wildlife Mitigation Features	61413
Maintenance of Dams, Reservoirs, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Flood Damage Reduction	61211
Maintenance for Flood Damage Reduction Functions	612-- <sup>1/</sup>
Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for the Mississippi River and Tributaries (MR&T)	61212
Maintenance for Navigation Functions	611-- <sup>1/</sup>
Maintenance of Locks, Dams, Reservoirs, Levees, Other Structures, Service Facilities, Permanent Operating Equipment, Etc. for Navigation	61110
Maintenance for Recreation	61510 <sup>1/</sup>
Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures	61414
Maintenance for Flood Damage Reduction	61210 <sup>1/</sup>
Maintenance of Recreation Facilities, Visitor Centers, Other Operating Equipment, Etc.	61511
Major Rehabilitation Evaluation Reports	60122
Major Rehabilitation Evaluation Reports	60325
Major Rehabilitation Evaluation Reports	60222
Management of Wildlife Mitigation Features	60413
Management of Natural Resources	60411
Management and Curation of Archeological and Cultural Resources	60412
Miscellaneous Hydraulic Power Generation Expenses	60314**
Mitigation of Archeological and Cultural Resources	61412
National Emergency Preparedness Program (NEPP)	60710 <sup>1/</sup>
NEPP Requirements Analysis and Studies	60712

<b>TABLE C-2.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
NEPP Management and Operations	60711
NEPP Support of Emergency Ops Ctr	60713
NEPP Training and Exercises	60716
Non-baseline Maintenance Supervision for Hydropower	613n1
Non-baseline Maintenance of Power Plants, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	613n0 <sup>1/</sup>
Non-baseline Maintenance of Hydraulic Structures for Hydropower	613n2
Non-baseline Maintenance of Miscellaneous Hydraulic Plant for Hydropower	613n4
Non-baseline Maintenance of Electric Plant for Hydropower	613n3
Operation for Recreation	60510 <sup>1/</sup>
Operation/management of Recreation Areas/facilities, Visitor Centers, Reservoirs, Service Facilities and Equipment, Etc. for Recreation	60511**
Operation for Recreation Functions	605-- <sup>1/</sup>
Operation for Environmental Stewardship	60410 <sup>1/</sup>
Operation for Environmental Stewardship Functions	604-- <sup>1/</sup>
Operation of Dams, Power Plants, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Hydropower	60310 <sup>1/</sup>
Operation for Hydropower Functions	603-- <sup>1/</sup>
Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Flood Damage Reduction	60210**
Operation for Flood Damage Reduction Functions	602-- <sup>1/</sup>
Operation of Locks, Dams, Reservoirs, Service Facilities, Permanent Operating Equipment, Etc. for Navigation	60110 **
Operation for Navigation Functions	601-- <sup>1/</sup>
Operations - Supervision and Engineering	60311**
Purchase/maintenance of Water Management (Control and Quality) Equipment for Navigation	61140

**TABLE C-2.2**  
**WORK CATEGORY CODES - ALPHABETICALLY ORDERED**

DESCRIPTION	WORK CATEGORY CODE
Purchase/maintenance of Water Management (Control and Quality) Equipment for Flood Damage Reduction	61240
Purchase/maintenance of Water Management Equipment (Control and Quality) for Environmental Stewardship	61440
Purchase/maintenance of Water Management Equipment (Control and Quality) for Recreation	61540
Purchase/maintenance of Water Management (Control and Quality) Equipment for Hydropower	61340
Real Estate for Hydropower	61350 <sup>1/</sup>
Real Estate for Flood Damage Reduction	61250 <sup>1/</sup>
Real Estate Management for Hydropower	60350*
Real Estate for Environmental Stewardship	61450 <sup>1/</sup>
Real Estate for Navigation	61150 <sup>1/</sup>
Real Estate Management for Flood Damage Reduction	60250*
Real Estate for Recreation	61550 <sup>1/</sup>
Real Estate Management for Environmental Stewardship	60450*
Real Estate Management for Recreation	60550*
Real Estate Management for Navigation	60150*
Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Hydropower	61370 <sup>1/</sup>
Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) Projects for Navigation	61170
Reserved	60530
Reserved	61630
Reserved	61130
Reserved	61230
Reserved	61330

<b>TABLE C-2.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Reserved	61530
Reserved	60430
Reserved	61430
Resolution of Real Estate Encroachments for Hydropower	61352
Resolution of Real Estate Encroachments for Navigation	61152
Resolution of Real Estate Encroachments for Flood Damage Reduction	61252
Resolution of Real Estate Encroachments for Environmental Stewardship	61452
Resolution of Real Estate Encroachments for Recreation	61552
Studies and Surveys for Environmental Stewardship	60420
Studies and Surveys for Navigation	60120 <sup>1/</sup>
Studies and Surveys	60121*
Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses	60324
Studies and Surveys - Electric Expenses	60323
Studies and Surveys - Hydraulic Expenses	60322
Studies and Surveys - Supervision and Engineering	60321
Studies and Surveys for Flood Damage Reduction	60220 <sup>1/</sup>
Studies and Surveys	60221
Studies and Surveys for Recreation	60520
Studies and Surveys for Hydropower	60320 <sup>1/</sup>
Water Management (Control and Quality) Activities – Operation of Water Control Data Systems for Hydropower	60342
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Environmental Stewardship	60442
Water Management (Control and Quality) Activities for Recreation	60540 <sup>1/</sup>
Water Management (Control and Quality) Activities - Operation of Water	60242

<b>TABLE C-2.2</b> <b>WORK CATEGORY CODES - ALPHABETICALLY ORDERED</b>	
DESCRIPTION	WORK CATEGORY CODE
Control Data Systems for Flood Damage Reduction	
Water Management (Control and Quality) Activities - Analysis and Studies for Flood Damage Reduction	60241
Water Management (Control and Quality) Activities for Flood Damage Reduction	60240 <sup>1/</sup>
Water Management (Control and Quality) Activities - Analysis and Studies for Environmental Stewardship	60441
Water Management (Control and Quality) Activities for Environmental Stewardship	60440 <sup>1/</sup>
Water Management (Control and Quality) Activities - Analysis and Studies for Recreation	60541
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Recreation	60542
Water Management (Control and Quality) Activities - Operation of Water Control Data Systems for Navigation	60142
Water Management (Control and Quality) Activities - Analysis and Studies for Navigation	60141
Water Management (Control and Quality) Activities for Navigation	60140 <sup>1/</sup>
Water Management (Control and Quality) Activities for Hydropower	60340 <sup>1/</sup>
Water Management (Control and Quality) Activities - Analysis and Studies for Hydropower	60341

<sup>1/</sup> SUMMARY COST ACCOUNT/WORK CATEGORY - COSTS MAY NOT BE CHARGED DIRECTLY TO THESE ACCOUNTS.

\*Feature Cost Codes marked with an asterisk require added data in project work description, justification statement, or output measures. See Table C-2.5.

\*\*Although Feature Cost Codes marked with double asterisk require no description or funding argument, requested resources will be in consonance with funding level definition and prior year experience.

**TABLE C-2.3**  
**O&M WORK CATEGORY CODE**  
**MATRIXES AND DEFINITIONS**

Tables 2.3a and 2.3b are-Operation and Maintenance Work Category Code Matrix sheets. Table 2.3c includes the definitions of the Operation WCCs. Table 2.3d includes the definitions of the Maintenance WCCs.

The major O&M functions are broken down into Work Category Codes, together with a description of work to be performed the pages following the spreadsheet.

<b>Table C-2.3a</b> <b>Operation Work Category Code Matrix (by Business Function)</b>						
<b>WCC</b>	<b>NAVIGATION 601XX</b>	<b>FLOOD DAMAGE REDUCTION 602XX</b>	<b>HYDROPOWER 603XX</b>	<b>ENVIRONMENTAL STEWARDSHIP 604XX</b>	<b>RECREATION 605XX</b>	<b>JOINT ACTIVITIES 606XX</b>
<b>60X10</b>	OPERATIONS	OPERATIONS	OPERATIONS	OPERATIONS	OPERATIONS	OPERATIONS
<b>60X20</b>	STUDIES & SURVEYS	STUDIES & SURVEYS	STUDIES & SURVEYS	STUDIES & SURVEYS	STUDIES & SURVEYS	STUDIES & SURVEYS
<b>60X30</b>	DAM SAFETY	DAM SAFETY	DAM SAFETY	DAM SAFETY	DAM SAFETY	DAM SAFETY
<b>60X40</b>	WATER MANAGEMENT	WATER MANAGEMENT	WATER MANAGEMENT	WATER MANAGEMENT	WATER MANAGEMENT	WATER MANAGEMENT
<b>60X50</b>	REAL ESTATE MANAGEMENT	REAL ESTATE MANAGEMENT	REAL ESTATE MANAGEMENT	REAL ESTATE MANAGEMENT	REAL ESTATE MANAGEMENT	REAL ESTATE MANAGEMENT
<b>60X60</b>	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE
<b>60X70</b>	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED
<b>60X80</b>	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED
<b>60X90</b>	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED



<b>Table C-2.3b</b> <b>Maintenance Work Category Code Matrix (by Business Function)</b>						
WCC	NAVIGATION 611XX	FLOOD DAMAGE REDUCTION 612XX	HYDROPOWER 613XX	ENVIRONMENTAL STEWARDSHIP 614XX	RECREATION 615XX	JOINT ACTIVITIES 616XX
<b>61X10</b>	MAINTENANCE EXCLUDE DREDGING	MAINTENANCE EXCLUDE DREDGING	MAINTENANCE EXCLUDE DREDGING	MAINTENANCE EXCLUDE DREDGING	MAINTENANCE EXCLUDE DREDGING	MAINTENANCE EXCLUDE DREDGING
<b>61X20</b>	DREDGING	DREDGING	DREDGING	DREDGING	DREDGING	DREDGING
<b>61X30</b>	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED
<b>61X40</b>	WATER MANAGEMENT EQUIPMENT	WATER MANAGEMENT EQUIPMENT	WATER MANAGEMENT EQUIPMENT	WATER MANAGEMENT EQUIPMENT	WATER MANAGEMENT EQUIPMENT	WATER MANAGEMENT EQUIPMENT
<b>61X50</b>	REAL ESTATE	REAL ESTATE	REAL ESTATE	REAL ESTATE	REAL ESTATE	REAL ESTATE
<b>61X60</b>	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE	ENVIRONMENTAL COMPLIANCE
<b>61X70</b>	REMAINING O&M MAJOR REHAB.	RESERVED	REMAINING O&M MAJOR REHAB.	RESERVED	RESERVED	RESERVED
<b>61X80</b>	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED
<b>61X90</b>	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED	RESERVED

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

**O&M Operations Accounts By Business Function:**

Navigation (**601--**)  
Flood Damage Reduction (**602--**)  
Hydropower (**603--**)  
Environmental Stewardship (**604--**)  
Recreation (**605--**)  
Joint Activities (**606--**)

A Breakdown of Work Category Codes (WCC's) and descriptions under these functions is on the following pages:

WORK CATEGORY CODE:     **60110** - Operations for Navigation

WORK CATEGORY DESCRIPTION: Operations of Locks, Dams, Reservoirs, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for navigation features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of **lock gates and/or associated equipment**; maintaining lock records; removing debris, ice and snow, cleanup of lock facilities; routine adjusting of meters, relays, instruments, radios and regular equipment; lubrication of equipment;

of **dam structures and appurtenant equipment** such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes all costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

to **perform reservoir inspections and patrols**, removal and control of trash and debris (major periodic or one-time removal of growth and debris from the reservoir should be recorded in Work Category Code 61110); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities; insect control and elimination of health and safety hazards;

of **project-owned permanent facilities** such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery are charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories. This activity includes costs of buildings, grounds and utilities related to the operation of the Los Angeles-Long Beach and San Francisco Bay hydraulic models located in South Pacific Division and it does not include costs associated with recreation facilities and areas which will be included in Work Category Code 60511;

of **all tools and equipment**, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project-owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles;

for **prevention of obstructive and injurious deposits at NAD projects** as authorized by the Act approved 29 June 1888, as amended, including all costs for surveillance at harbors, channels, waterfront construction sites, and at overboard ocean dumping sites, costs to administer outstanding enforcement actions on prior noted violations of Federal statutes, and any costs required for ground or aerial surveillance.

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60121** - Studies and Surveys for the Navigation Function

WORK CATEGORY DESCRIPTION: Studies and Surveys including project condition surveys, dredging studies, etc. for navigation features.

Includes all costs to perform surveys for the purpose of determining elevation, grade and sedimentation conditions in navigation projects, investigation of sunken vessels, and to prepare dredging studies. For program management purposes, all projects with funding requirements (dredging or otherwise) under the Baseline or Non-deferrable levels should have any needed surveys programmed under the project name. All other surveys should be programmed in aggregation under PWID 14600: Project Condition Surveys. Funding for PWID 14600: Project Condition Surveys, will be adjusted after overall dredging program levels are determined.

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WORK CATEGORY CODE: **60122** - Studies and Surveys for Navigation - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for navigation features.

Includes all costs to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction, General (CG) funds are allocated to the project.

WORK CATEGORY CODE: **60123** - Studies and Surveys for Navigation - Environmental Studies and Monitoring for Dredging Purposes

WORK CATEGORY DESCRIPTION: Environmental Studies and Monitoring for Dredging Purposes.

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs for environmental studies and monitoring for dredging purposes including all costs of study and analysis activities associated with long range environmental activities related to waterways. These activities are needed to ensure that appropriate information and requirements are fulfilled so that E&D for dredging can be completed on a timely basis. Dredged Material Management Plans (DMMPs) are included in this Work Category. Environmental requirements to perform maintenance dredging of Federal channels (e.g. water quality certification, bio-assays, water quality testing, Environmental Impact Statements, and environmental assessments) should also be included in this Work Category.

WORK CATEGORY CODE: **60131** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Navigation Function

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to navigation features.

Includes all costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60132** - Formal Periodic Inspections and Reports for Dam Safety related to the Navigation Function

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to navigation features.

Includes all costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal including revetments, dikes, groins, breakwaters, jetties, seawalls, piers and other similar structures provided in seas, lakes, rivers, canals, exposed tidal waters and harbors.

WORK CATEGORY CODE: **60133** - Dam Safety Assurance Studies related to the Navigation Function

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety related to navigation features.

Includes all costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60141** - Water Management (Control and Quality) Activities for Navigation - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for navigation features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60142.

WORK CATEGORY CODE: **60142** - Water Management (Control and Quality) Activities for Navigation - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for navigation features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies, and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61140.

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WORK CATEGORY CODE: **60150** - Real Estate Management for the Navigation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for navigation features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60160** - Environmental Compliance Management for the Navigation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for navigation features.



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Includes all operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **60170**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60180**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60190**

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60210** - Operations for Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Operations of Dams, Reservoirs, Levees, Hurricane Barrier Gates, and Other Flood Damage Reduction Non-Dam Structures, Pumping Plants, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for flood damage reduction features.

Includes all costs for the operation; necessary materials, supplies, equipment and transportation costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of **dam structures and appurtenant equipment** such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes all costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to **perform reservoir inspections and patrols**, removal and control of trash and debris (major periodic or one-time removal of growth and debris from the reservoir should be recorded under Work Category Code 61210); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities, insect control and elimination of health and safety hazards;

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of **levees, hurricane barrier gates, and other gated non-dam flood damage reduction structures**; vegetation control on flood damage reduction structures; removal of snow and ice from structures;

of **pumping plants, pumps and associated equipment**; collecting and maintaining operational records; routine replacement, purification and testing of insulating, lubricating and hydraulic oils; lubricants and lubricating equipment; minor maintenance of electrical equipment, cleaning, testing, and adjustment of motor starters, relays, meters, and similar equipment; minor maintenance and repair of pumps, motors, engines, trash raking equipment, gate hoists, gates, fire fighting, and other equipment required for operation; minor maintenance of buildings, roads, and grounds; removal of debris, ice, and snow;

of **project-owned permanent facilities** such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery are charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories. This activity does not include costs associated with recreation facilities and areas which will be included in Work Category Code 60511;

of **all tools and equipment**, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project-owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles.

WORK CATEGORY CODE: **60221** - Studies and Surveys for the Flood Damage Reduction Function

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Work Category Codes and Definitions

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WORK CATEGORY DESCRIPTION: Non-Navigation Project Condition Studies, including Dredging Studies, for flood damage reduction features.

Includes all costs to prepare reconnaissance reports or studies related to the maintenance and rehabilitation of Civil Works projects such as foundation reports, embankment criteria, O&M manuals, sediment surveys at flood damage reduction projects, surveillance of northern boundary waters, and hydraulic model analyses prior to the engineering and design phase.

WORK CATEGORY CODE: **60222** - Studies and Surveys for Flood Damage Reduction - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for flood damage reduction features.

Includes all costs to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction, General (CG) funds are allocated to the project.

WORK CATEGORY CODE: **60223** – Studies, Surveys and Inspections of Completed Works - Local Protection Projects

WORK CATEGORY DESCRIPTION: Studies, Surveys and Inspections of Local Protection Projects for flood damage reduction features.

Includes all costs related to the inspection of Federally constructed, locally operated and maintained projects to ensure compliance with local cooperative agreements. This Work Category does not include costs for projects covered by PL 84-99. Includes all costs for technical review and approval of sponsor-proposed alterations, improvements, excavation or construction within the limits of the project right-of-way; advice given to sponsors related to the effects of such activities on the function/operation of the project and information on acceptable construction methods; all costs to update O&M Manuals; initial funding of reconnaissance or evaluation reports; and PED for major rehabilitation, dam safety assurance, deficiency correction and reconstruction as applicable until Construction, General (CG) funds are allocated.

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WORK CATEGORY CODE: **60231** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to flood damage reduction features.

Includes all costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60232** - Formal Periodic Inspections and Reports for Dam Safety related to the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to flood damage reduction features.

Includes all costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

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(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60233** - Dam Safety Assurance Studies related to the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety related to flood damage reduction features.

Includes all costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60241** - Water Management (Control and Quality) Activities for Flood Damage Reduction - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for flood damage reduction features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60242.

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WORK CATEGORY CODE: **60242** - Water Management (Control and Quality) Activities for Flood Damage Reduction - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for flood damage reduction features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies, and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61240.

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WORK CATEGORY CODE: **60250** - Real Estate Management for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for flood damage reduction features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of, and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government. Includes reconciliation of financial records with flood damage reduction land and mineral lease receipts, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60260** - Environmental Compliance Management for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for flood damage reduction features.



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Includes all operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088. This Work Category also includes all costs for the management and curation of Orphan Collections and archeological materials collected from early local protection projects and subsequently turned over to local sponsors for operation and maintenance. All other costs for management and curation of archeological resources are included in Work Category Code 60412.

WORK CATEGORY CODE: **60270**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60280**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60290**

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Work Category Codes and Definitions

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WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60310 (60311-60314)** - Hydropower Operations Costs for this function will be sub-divided as follows:

**60311** - Hydropower Operations - Supervision and Engineering, FERC #535. Costs for labor, materials and other expenses incurred in the general supervision of the operation of hydraulic generating stations. Direct supervision of specific activities will be charged to the appropriate accounts;

**60312** - Hydropower Operations - Hydraulic Expenses, FERC #537. Costs for labor, materials and other expenses incurred in operating power intake works whether or not the powerhouse is an integral part of the intake dam;

**60313** - Hydropower Operations - Electric Expenses, FERC #538. Costs for labor, materials and other expenses incurred in operating turbines, generators, auxiliary apparatus, switchgear and other electric equipment to the point where electricity leaves for transmission by the marketing agency or other project. Keeping plant logs and records, and preparing reports of operation are included herein;

**60314** - Hydropower Operations - Miscellaneous Hydraulic Power Generation Expenses, FERC #539. Costs for labor, materials and other expenses not specifically provided for in other power plant operation accounts. Includes costs for custodial and other administrative services.

WORK CATEGORY DESCRIPTION: Operations of Power Plants.

Includes specific costs for the general supervision and engineering associated with the operation; routine materials, supplies, equipment and transportation costs; associated hired labor and contract support; and other costs: :

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**O&M Operations Accounts**

of **power plants** including hydraulic generating stations, and their associated power intake structures, turbines, generators, auxiliary apparatus, switchgear, and other electrical or electronic equipment to the point where electricity leaves for transmission by the marketing agency or project. Includes miscellaneous costs such as custodial, administrative services and training power plant trainees including labor. Costs not specific to hydropower will be included in Work Category Code 60610.

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WORK CATEGORY CODE: **60320 (60321-60324)** - Studies and Surveys for the Hydropower  
Function Costs for this function will be sub-divided as follows:

**60321** - Studies and Surveys - Supervision and Engineering, FERC #535. Costs for labor, materials and other expenses incurred in the general supervision of the operation of hydraulic generating stations. Direct supervision of specific activities will be charged to the appropriate accounts;

**60322** - Studies and Surveys - Hydraulic Expenses, FERC #537. Costs for labor, materials and other expenses incurred in operating power intake works whether or not the powerhouse is an integral part of the intake dam;

**60323** - Studies and Surveys - Electric Expenses, FERC #538. Costs for labor, materials and other expenses incurred in operating turbines, generators, auxiliary apparatus, switchgear and other electric equipment to the point where electricity leaves for transmission by the marketing agency or other project;

**60324** - Studies and Surveys - Miscellaneous Hydraulic Power Generation Expenses, FERC #539. Costs for labor, materials and other expenses not specifically provided for in other power plant operation accounts.

WORK CATEGORY DESCRIPTION: Studies and Surveys for hydropower features.

Includes all costs to prepare reconnaissance reports or studies related to the maintenance and rehabilitation of hydropower projects such as foundation reports, embankment criteria, O&M manuals, sediment surveys and hydraulic model analyses prior to the engineering and design phase.

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WORK CATEGORY CODE: **60325** - Studies and Surveys for Hydropower - Major Rehabilitation Evaluation Reports

WORK CATEGORY DESCRIPTION: Major Rehabilitation Evaluation Reports for hydropower features.

Includes all costs for specific hydropower purposes to initiate new, or continue ongoing, major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction, General (CG) funds are allocated to the project.

WORK CATEGORY CODE: **60331** - Instrumentation, Data Collection and Analysis for Dam Safety related to the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety related to hydropower features.

Includes all specific costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60332** - Formal Periodic Inspections and Reports for Dam Safety related to Hydropower Activities, FERC #537

WORK CATEGORY DESCRIPTION: Formal Periodic Inspections and Reports for Dam Safety related to hydropower features.

Includes all specific costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

- (a) Dams, locks and dams, initial and second inspections if funded under O&M General, and
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high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60333** - Dam Safety Assurance Studies related to the Hydropower Function, FERC #537

WORK CATEGORY DESCRIPTION: Dam Safety Assurance Studies for Dam Safety activities related to hydropower features.

Includes all specific costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60341** - Water Management (Control and Quality) Activities for Hydropower - Analysis and Studies, FERC #537

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for hydropower features.

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Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60342.

WORK CATEGORY CODE: **60342** - Water Management (Control and Quality) Activities for Hydropower - Operation of Water Control Data Systems, FERC #537

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for hydropower features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems 8). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61340.

WORK CATEGORY CODE: **60350** - Real Estate Management for the Hydropower Function, FERC #537

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**WORK CATEGORY DESCRIPTION:** Real Estate Management including Compliance, and Utilization Inspections for hydropower features.

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

**WORK CATEGORY CODE:**     **60360** - Environmental Compliance Management for the Hydropower Function, FERC #539

**WORK CATEGORY DESCRIPTION:** Environmental Compliance Management for hydropower features.

Includes all operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.



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WORK CATEGORY CODE: **60370**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60380**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60390**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60411** - Management of Natural Resources

WORK CATEGORY DESCRIPTION: Management of Natural Resources and Operational Management Plans.

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Includes all costs for the management and operations;

of **natural resources** including the conservation and protection of soil, water, wetland, forest, vegetation, Federally listed endangered and threatened species, waterfowl, fish and wildlife, grasslands and range, and other resources essential to the total management of specific projects;; salaries, equipment, supplies, managing permits issued under authority of Title 36 Code of Federal Regulations, compliance with the Endangered Species Act; managing areas under license or outlease, spawning beds, fish shelters, fish and waterfowl impoundments; conducting reforestation activities, timber salvage, timber trespass surveillance, timber cruising, stand improvement, and haul road maintenance; pest and predator control; conduct vegetation plantings, prescribed burning, fertilization, noxious weed control, maintain riparian vegetation, establishing wildlife food plots, manipulating vegetation; conducting wildlife habitat preservation management or improvement activities; forestry and range management; establishing firelanes and conducting fire prevention; managing trails and off-road vehicles; erosion control; conducting citation authority programs outside developed recreation areas; conducting interpretive programs; and boundary surveillance and routine, recurring maintenance of boundary monumentation. This Work Category excludes costs associated with fish hatcheries and fish passage. Also, natural resources activities conducted for the enhancement of recreation areas will be charged to Work Category Code 60511;

of **Operational Management Plans**, including all costs for salaries, supplies and materials, and equipment related to the preparation and updating of Operational Management Plans and supplements. Charges may include field units that perform data collection and analysis.

WORK CATEGORY CODE:     **60412** - Management and Curation of Archeological and Cultural Resources

WORK CATEGORY DESCRIPTION: Management and Curation of Archeological and Cultural Resources.

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Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs for the management and operations of archeological and cultural resources including identification, surveillance, studies, literature searches, reconnaissance surveys, inventory, subsurface testing, development and update of management plans for historical, archaeological and cultural resources, outreach, educational and Native people programs, operations activities associated with identified historical, archaeological and cultural resources, and enforcement of Title 36 Code of Federal Regulations, the National Historic Preservation Act of 1966, the Archeological Resources Protection Act of 1979 and other applicable laws and regulations. Costs for Orphan Collections are included in Work Category Code 60260.

WORK CATEGORY CODE:     **60413** - Management of Wildlife Mitigation Features

WORK CATEGORY DESCRIPTION: Management of Wildlife Mitigation Features.

Includes all costs for the management and operations of wildlife mitigation activities including costs to comply with Federal laws and mitigation requirements to offset losses caused by existing and new project activities. This Work Category does not include acquisition costs.

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WORK CATEGORY CODE: **60414** - Fisheries Management - Operation of Fish Hatcheries

WORK CATEGORY DESCRIPTION: Fisheries Management – Operation of Fish Hatcheries.

Includes all costs for salaries, equipment, supplies and all costs associated with the operation, of fish hatcheries, egg collecting stations and related facilities for provision of fish propagation. It excludes fisheries development activities included in Work Category Code 60411.

WORK CATEGORY CODE: **60415** - Fisheries Management - Fish Hauling Activities and Fish Passage Structures

WORK CATEGORY DESCRIPTION: Fisheries Management - Fish Hauling Activities and Fish Passage Structures.

Includes all costs associated with operation of facilities and equipment for collecting, trapping, transportation and passage of fish at dams and navigation facilities. Facilities include ladders, nets, elevators and locks. It excludes fisheries development activities included in Work Category Code 60411.

WORK CATEGORY CODE: **60416** - Comprehensive Master Plans

WORK CATEGORY DESCRIPTION: Preparation and Updating of Comprehensive Master Plans and Master Plan Supplementals.

Includes all costs to initiate new, or continue ongoing, comprehensive Master Plans, including all costs for salaries, supplies and materials, and equipment related to the preparation and updating of Master Plans and Master Plan Supplements. Charges may include field units that perform data collection and analysis.

WORK CATEGORY CODE: **60420** – Studies and Surveys for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Natural Resources Studies and Surveys for environmental stewardship features, including Fisheries and Wildlife Development Activities.

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Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs of fish and wildlife studies, including fish hauling and passage analyses to meet mitigation requirements to support long-range development and modification of existing structures, applicable to a specific project and pro rata share of basin-wide fish and wildlife studies; inventorying the natural resources base; conducting surveys of fish and wildlife; performing population dynamics and other studies; and of archeological and cultural resources including identification, surveillance, studies, literature searches, reconnaissance surveys, indexing, inventory, testing, development and update of management plans for historical, archaeological and cultural resources, including costs of operations activities associated with identified historical, archaeological and cultural resources.

WORK CATEGORY CODE: **60430**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60441** - Water Management (Control and Quality) Activities for Environmental Stewardship - Analysis and Studies

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for environmental stewardship features.

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60442.

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60442** - Water Management (Control and Quality) Activities for Environmental Stewardship - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for environmental stewardship features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61440.

WORK CATEGORY CODE: **60450** - Real Estate Management for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for environmental stewardship features.

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60460** - Environmental Compliance Management for the  
Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for environmental  
stewardship features.

Includes all operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **60470**

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60480**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60490**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60511** - Operations for the Recreation Function

WORK CATEGORY DESCRIPTION: Operations and Management of Recreation Areas and Facilities, Visitor Centers, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc. for recreation features.



Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs for the management and operation; necessary materials, supplies, equipment, transportation and rental costs associated with operations; associated hired labor and contract support; routine materials and supplies; and other costs:

of **recreation areas and facilities** including all costs for salaries, per diem, travel, signs collecting and administering user fees, brochures, maps, participation in public and special events and exhibitions, costs of trash removal, cleanup, mowing, and gate or park attendants. Also includes operations costs for buildings, grounds, landscaping, removal of hazardous trees, control of vegetation, roads, bridges, parking areas, grills, tables, trails, playgrounds and permanent operating equipment utilized for recreation purposes;

of **visitor centers** including all costs associated with visitor center operations, such as all personnel costs, custodial duties, supporting costs of cooperating associations, snow, ice and debris removal, lawn and shrubbery maintenance, landscaping, utilities, exhibits, grounds, heating and cooling systems, audio visual programs, building material, and equipment costs;

to **perform reservoir inspections and patrols** for recreation purposes;

of **project-owned permanent facilities** for recreation purposes;

of **all tools and permanent operating equipment** including direct costs of automotive and other equipment assigned to the recreation function. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles.

WORK CATEGORY CODE: **60512** - Operations and Management for the Recreation Function using Special Recreation Users Fee (SRUF) Funds

Costs previously included here should be included in WCC 60511.

WORK CATEGORY CODE: **60513** - Operations for the Recreation Function - Law Enforcement Agreements

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Work Category Codes and Definitions

**O&M Operations Accounts**

**WORK CATEGORY DESCRIPTION:** Operations for recreation features - Costs and Supervision of Law Enforcement Agreements.

Includes all costs for cooperative agreements for law enforcement with states and their political subdivisions under PL 94-587, and all costs for technical and administrative charges, including project and district costs for administration of law enforcement agreements and activities.

**WORK CATEGORY CODE:**     **60520** - Studies and Surveys for the Recreation Function

**WORK CATEGORY DESCRIPTION:** Studies and Surveys for recreation features.

Includes all costs to prepare visitor surveys, reports or studies related to the operation, maintenance and rehabilitation of recreation facilities.

**WORK CATEGORY CODE:**     **60530**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE:**     **60541** - Water Management (Control and Quality) Activities for Recreation - Analysis and Studies

**WORK CATEGORY DESCRIPTION:** Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions for recreation features.

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Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; all costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control management decisions; all costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and all costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes all costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management. Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Costs for data collection are included in Work Category Code 60542.

WORK CATEGORY CODE: **60542** - Water Management (Control and Quality) Activities for Recreation - Operation of Water Control Data Systems

WORK CATEGORY DESCRIPTION: Water Management (Control and Quality) Activities - Operation of Water Control Data Systems including Data Collection for recreation features.

Includes all costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes all costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61540.

WORK CATEGORY CODE: **60550** - Real Estate Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Real Estate Management including Compliance, and Utilization Inspections for recreation features.

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Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60560** - Environmental Compliance Management for the Recreation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance Management for recreation features.

Includes all operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for recreation facilities and visitor centers. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60570**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60580**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60590**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60610** - Joint Activities for Operations, FERC #535, #537, #538 and #539

WORK CATEGORY DESCRIPTION: Joint costs for Operations activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation. These activities may include the operation of Dams, Reservoirs, Levees, Other Non-Dam Multi-purpose

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Work Category Codes and Definitions

**O&M Operations Accounts**

Structures, Pumping Plants, Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Permanent Operating Equipment, etc.

Includes all joint costs for the operation routine materials, supplies, equipment and transportation costs; hired labor and contract support associated with operations; and other costs:

of **dam structures and appurtenant equipment** such as spillway gates, intake and outlet works, and sluiceways for reservoir regulation; removing and disposing of ice, snow, trash, and debris on or in the vicinity of the dam or dam structures; cleanup of dam structures and facilities; routine testing and adjustment of gauges, meters, instruments, and relays in dam structures; disposal and control of weeds, brush, trees, and aquatic growth in the vicinity of dam structures; and grass cutting on earth-fill dams. Includes costs for dam safety/failure training of project personnel, preparation of flood emergency plans, dam contingency plans, dam surveillance plans, and provision for technical assistance to local interests concerning dam failure. When this account includes municipal or industrial water delivery activities, a separate sub-element should be established in CEFMS to record appropriate costs for each such facility for cost allocation purposes;

to **perform reservoir inspections and patrols**, removal and control of trash and debris (excluding major periodic or one-time removal of growth and debris from the reservoir which should be included in maintenance accounts); minor bank erosion control; minor cleaning of reservoir area for weeds, brush, trees, and aquatic growth; boundary surveillance and routine, recurring maintenance of boundary monumentation at projects without natural resource activities, insect control and elimination of health and safety hazards;

of **levees and other non-dam multi-purpose structures**; vegetation control, removal of snow and ice from multi-purpose structures;

of **pumping plants, pumps and associated equipment**; collecting and maintaining operational records; routine replacement, purification and testing of insulating, lubricating and hydraulic oils; lubricants and lubricating equipment; minor maintenance of electrical equipment, cleaning, testing, and adjustment of motor starters, relays, meters, and similar equipment; minor maintenance of pumps, motors, engines, trash raking equipment, gate hoists, gates, fire fighting, and other equipment required for operation; minor maintenance of buildings, roads, and grounds; removal of debris, ice, and snow;

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Work Category Codes and Definitions

**O&M Operations Accounts**

of **project-owned permanent facilities** such as administration and shop buildings, storage and garage buildings and areas, community buildings, local streets and sidewalks, landscaping, utility facilities such as electric, gas, water, and sewage, all security and protective measures, and permanent roads, including the road across the top of the dam, and parking areas near the dam, railroads, and bridges required for access and other purposes in connection with the operation of a project. It also includes bridges provided as a project feature for the passage of highway and railway traffic over improved channels. Direct costs included are snow and ice removal from project roads, parking areas and walkways; sanding and salting project roads, parking areas and walkways; minor patching, signs, ditch cleaning, culvert cleaning and similar duties; bridge operation; cleanup of project roads, railroads, and bridges. Where space in other basic structures, such as a dam or powerhouse, is used in lieu of any above mentioned facilities, such allocated space is not separated from the basic structure. Buildings which house operating machinery and serve other purposes as well are included in this activity, but the costs to operate the machinery is charged to the appropriate Work Categories. Buildings which house specific operating machinery, spare parts, equipment, etc., will be charged to the appropriate Work Categories;

of **all tools and equipment**, including laboratory, shop, warehousing, communications, surveys, and transportation equipment, office furniture and equipment. Project owned sedimentation and degradation measuring facilities, rainfall and stream-gauging devices, fixed sand bypassing systems, and like equipment are also included. Includes direct costs of automotive and other equipment not assigned to specific features. Vehicle accounts will be maintained by group classifications as provided for Revolving Fund vehicles. Operating costs of permanent equipment assigned to specific functions will be charged to those functions.

WORK CATEGORY CODE: **60621** - Joint Activities for Studies and Surveys, FERC #535, #537, #538 and #539

WORK CATEGORY DESCRIPTION: Joint costs for Studies and Surveys including project condition surveys, dredging studies, etc. NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs to perform studies or surveys for multi-purpose projects including sedimentation conditions and dredging studies.

WORK CATEGORY CODE: **60622** - Joint Activities for Studies and Surveys - Major Rehabilitation Evaluation Reports, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Studies and Surveys - Major Rehabilitation

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Work Category Codes and Definitions

**O&M Operations Accounts**

Evaluation Reports NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for major rehabilitation evaluation reports. Operation and Maintenance (O&M) funds are to be used only until Construction, General (CG) funds are allocated to the project.

WORK CATEGORY CODE: **60631** - Joint Activities for Instrumentation, Data Collection and Analysis for Dam Safety, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs of Instrumentation for Engineering Analysis and Continuing Evaluation Data Gathering Inspections, and Data Analysis for Dam Safety NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for the operation of instruments in existing dam structures for safety evaluation and all costs of obtaining, analyzing and reporting instrumentation data for purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **60632** - Joint Activities for Formal Periodic Inspections and Reports for Dam Safety, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Formal Periodic Inspections and Reports for Dam Safety NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.



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Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all joint costs related to the scheduled periodic inspections and reporting of projects and bridges needed to meet inspection frequency requirements of ER 1110-2-100 as follows:

(a) Dams, locks and dams, initial and second inspections if funded under O&M General, and high hazard structures.

(b) Public Bridges.

(c) Structures whose failure would be a major loss to the national infrastructure or cause severe economic distress.

(d) Other projects where known conditions warrant inspections at a frequency more often than normal.

WORK CATEGORY CODE: **60633** - Joint Activities for Dam Safety Assurance Studies, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Dam Safety Assurance Studies NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs of reconnaissance studies and special engineering investigations for known or suspected dam safety deficiencies, e.g. seismic evaluations, seepage studies, erosion studies, etc.

WORK CATEGORY CODE: **60641** - Joint Activities for Water Management (Control and Quality) - Analysis and Studies, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Water Management (Control and Quality) Activities - Analysis, Studies and Regulation Instructions NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for personnel and space to manage the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current water control/quality plan; costs to prepare routine regulation instructions and runoff forecasts, coordinate with other agencies and entities, prepare water control manuals, disseminate water control information, training, travel and other associated costs required to make sound water control

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

management decisions; costs for reservoir and river analyses to improve the quality of water within and downstream from the reservoirs; and costs related to studies of the means to mitigate water quality problems and studies to determine present and future water quality needs. Also includes costs for water management studies to improve efficiency or mitigate constraints on approved plans of regulation, annual updating of notification lists, and funds transferred to other agencies and any similar items needed to accomplish this activity. This includes development of the water quality component of water control manuals and daily decisions on multi-level releases and pro-rata share of office and computer facilities and other related costs associated with water management . Included also are costs to calibrate and make operational the forecasting and decision support models within the new Corps Water Management System (CWMS). Joint costs for data collection are included in Work Category Code 60642.

WORK CATEGORY CODE:     **60642** - Joint Activities for Water Management (Control and Quality)  
                                      - Operation of Water Control Data Systems, FERC #537

WORK CATEGORY DESCRIPTION: Joint costs for Water Management (Control and Quality) Activities - Operation of Water Control Data Systems NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for the operation of equipment, personnel and space to collect and process the hydrologic, hydraulic and meteorological data required for water control and quality activities in accordance with the current plan, data collection, and pro-rata share of office and computer facilities and other related costs associated with operations of water management data systems including the new Corps Water Management System (CWMS). Includes costs to coordinate with other agencies and entities, training, travel, funds transferred to other agencies and other associated costs required for operation of water management data systems. Costs for purchase and maintenance of new water control data systems equipment are included in Work Category Code 61640.

WORK CATEGORY CODE:     **60650** - Joint Activities for Real Estate Management, FERC #539

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate Management including Compliance, and Utilization Inspections NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Table C-2.3c  
Work Category Codes and Definitions

**O&M Operations Accounts**

Includes all joint costs, including contractual services, incident to granting to others the use of and performing inspections of property for purposes such as commercial concessions, industrial uses, public park and recreation, quasi-public and group camp use, fish and wildlife habitat management, selected agricultural and grazing uses and reconveyance clauses (restrictions) in deeds. Also includes granting use of and performing inspections of property granted and reserved to others for purposes such as road, street, waterline, powerline, and communication rights-of-way, as well as requests to drill for oil or gas on Government owned property where no oil or gas lease is required, and other uses covered by easements, licenses, and permits. Includes report preparation, determination of compliance after vacation of property subsequent to expiration or revocation of grant, and corrective measures where non-compliance is noted. Also includes appraisals, surveys, mapping, negotiations, preparation and execution of outgrants, renewal, extension, cancellation/termination documents, responses to request for use of real or related personal property, Executive Order surveys and public land withdrawals (applies to the 11 western states). Includes costs of utilization inspections of real property under the control of or subject to a service agreement with the Corps or the Government. Includes reconciliation of financial records with flood damage reduction land and mineral lease receipts, and real property accountability, including real property inventory updates and preparation of annual civil-owned property reports (GSA 1166).

WORK CATEGORY CODE: **60660** - Joint Activities for Environmental Compliance Management, FERC #539

WORK CATEGORY DESCRIPTION: Joint costs for Environmental Compliance Management activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint operational costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental assessment manuals. Includes all costs associated with management and oversight of environmental compliance for operations activities. Costs include salaries, training, materials, supplies, regulatory fees, drinking water and waste analysis, inspection of waste collection and disposal facilities, and internal and external environmental compliance assessments. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60670**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60680**

WORK CATEGORY DESCRIPTION: Reserved.

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60690**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **60711** - National Emergency Preparedness Program (NEPP) - Continuity of Operations

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Continuity of Operations activities.

Includes all costs required to develop, maintain and exercise Continuity of Operations Plans (COOP). Includes personnel and contracting costs for development of plans and Standard Operating Procedures (SOPs), training, participation in exercises and program management associated with USACE relocation and reconstitution missions as a result of either a natural or manmade (caused) disaster or emergency.

WORK CATEGORY CODE: **60712** - National Emergency Preparedness Program (NEPP) - National Preparedness Planning

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - National Preparedness Planning activities.

Includes all costs associated with, or in support of, deliberate planning for assigned catastrophic disaster response plans which ensure that Corps MSCs and districts can support the Nation during national emergency events. Includes personnel and contracting costs for deliberate planning, development of Standard Operating Procedures (SOPs), training, exercises, program management and coordination with related Federal, State, and local entities. Also includes costs associated with preparedness planning for Port Readiness and Military Assistance to Civil Disturbances.

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Work Category Codes and Definitions

**O&M Operations Accounts**

WORK CATEGORY CODE: **60713** - National Emergency Preparedness Program (NEPP) - Support of Emergency Operations Centers (EOCs)

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Support of Emergency Operations Centers (EOCs)

WORK CATEGORY CODE: **60714** - National Emergency Preparedness Program (NEPP) - Emergency Water Program

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Emergency Water Program.

Includes all personnel and contracting costs for those activities required to execute E.O. 12656 related to the Emergency Water Program. (For HQUSACE use only.)

WORK CATEGORY CODE: **60715** - National Emergency Preparedness Program (NEPP) - Continuity of Government

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Continuity of Government.

Includes all personnel and contracting costs for those activities associated with Continuity of Government, including plans to support the Federal Emergency Management Agency (FEMA) and other Federal, State and local agencies in their efforts to reestablish civil authority lost as a result of natural or manmade (caused) disaster or an attack on the United States. (For HQUSACE use only as directed.)

WORK CATEGORY CODE: **60716** - National Emergency Preparedness Program (NEPP) - Training and Exercises

WORK CATEGORY DESCRIPTION: National Emergency Preparedness Program (NEPP) - Training and Exercises.

Includes all costs for the development of and the participation in catastrophic disaster training and exercises in the inter- and intra-agency arena.

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Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

**O&M Maintenance Accounts By Business Function**

Navigation (611--)

Flood Damage Reduction (612--)

Hydropower (613--)

Environmental Stewardship (614--)

Recreation (615--)

Joint Activities (616--)

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61110** - Maintenance for the Navigation Function

WORK CATEGORY DESCRIPTION: Maintenance of Locks, Dams, Reservoirs, Dikes, Revetments, Breakwaters, Jetties, Seawalls, Piers, Levees and Similar Structures, Service Facilities, Permanent Operating Equipment, etc. excluding dredging activities for navigation features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment for non-Water Management activities:

of **lock and salt water control structures and facilities** for passage of waterborne traffic, including gates, valve operating machinery, lock walls, and guide and guard-walls including dolphins within the lock approaches for tie up, guard, or guide purposes;

of facilities and equipment for **dams, spillways, outlet works and auxiliary dams**;

of **reservoirs and facilities** including floating trash booms, trash racks, erosion control, drainage, major periodic or one time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60110); rim grouting or mine sealing, etc., to prevent leakage;

of **revetments, dikes, groins, breakwaters, jetties, seawalls, piers, levees and similar structures** provided in seas, lakes, rivers, canals, exposed tidal waters, and harbors;



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Work Category Codes and Definitions

**O&M Maintenance Accounts**

of **non-dredging navigation channel maintenance** including snagging, clearing, aquatic plant removal, removal of sunken vessels, drift removal, rock and other debris removal;

of **buildings, grounds, utilities, and roads, railroads and bridges**, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes direct costs for project utilities including electrical, gas, water, and sewer systems;

of **permanent operating equipment**;

of buildings, grounds and utilities that are part of the **hydraulic models in South Pacific Division**;

and for **instrumentation on lock facilities and dam structures** including all costs for the installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE:     **61121** - Dredging Activities for the Navigation Function

WORK CATEGORY DESCRIPTION: Dredging of Channels and Canals for navigation activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for maintenance dredging and disposal activities of navigation channels and canals, except project condition sediment survey costs which are included in Work Category Code 60121. Includes costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. Costs for long-range environmental requirements are included in Work Category Code 60123. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; creation of land using dredged material. Also includes related costs

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for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

**NOTE:** Line item submissions for Corps-owned hopper dredges should be separate from line item submissions for any other dredges.

WORK CATEGORY CODE:     **61122** - Dredging - Construction and Maintenance of Dredged Material Disposal Facilities for the Navigation Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for navigation features.

Includes all costs for the construction and the maintenance of dredged material disposal facilities including confined disposal facilities, and costs for required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation, and equipment usage.

WORK CATEGORY CODE:     **61130**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE:     **61140** - Water Management (Control and Quality) Equipment for the Navigation Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for navigation features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61151** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for navigation features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61152** - Real Estate - Resolution of Real Estate Encroachments for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for navigation features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. The costs for boundary line surveys and remarking are included in Work Category Code 61153.

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61153** - Real Estate - Boundary Monumentation and Rectification for the Navigation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for navigation features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61160** - Environmental Compliance (Remedial Actions) for the Navigation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Locks, Dams, Reservoirs, Breakwaters, Jetties, Seawalls, Piers, Levees, Other Control Structures, Pumping Plants, Other Facilities, Channels and Canals for navigation features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for locks, dams, reservoirs, breakwaters, jetties, seawalls, piers, levees, other control structures, pumping plants, other facilities, channels and canals. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental compliance assessment manuals. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must also include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **61170** - O&M Major Rehabilitation Projects for the Navigation Function

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY DESCRIPTION: Remaining O&M Funded Major Rehabilitation projects for navigation features.

Includes all major rehabilitation costs such as repair, replacement, additions and efficiency improvements to lock structures and facilities for passage of waterborne traffic, and all costs for facilities and equipment for dams, spillways, outlet works and auxiliary dams including gates, valve operating machinery, lock walls, and guide and guard-walls including dolphins within the lock approaches for tie up, guard, or guide purposes.

**NOTE:** Major rehabilitation, deficiency correction, and reconstruction projects are programmed for initial Construction, General (CG) appropriation and Inland Waterways Trust Fund moneys, as appropriate, only after applicable reconnaissance and/or evaluation reports have been approved. Work items for Major Rehabilitation Evaluation Reports are included in Work Category Code 60122. This Work Category will be used only until O&M funded Major Rehabilitation projects are completed.

WORK CATEGORY CODE: **61180**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61190**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61211** - Maintenance for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Maintenance of Dams, Reservoirs, Levees, Floodwalls, Hurricane Barriers, and Other Flood Damage Reduction Structures; Snagging, Clearing, Aquatic Plant Removal, Rock and Other Debris Removal, and Other Non-Dredging Flood Damage Reduction Channel Maintenance; Pumping Plants, Other Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Maintenance and Purchase of Permanent Operating Equipment for Non-Water Control Management Activities; etc. excluding dredging for flood damage reduction features.

Includes all direct costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

contract support, transportation costs and other costs required to perform this maintenance function;  
purchase of permanent operating equipment for non-Water Management activities:

of facilities and equipment for **dams, spillways, outlet works and auxiliary dams;**

of **reservoirs and facilities** including floating trash booms, trash racks, erosion control, drainage, major periodic or one-time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60210); and rim grouting or mine sealing, etc., to prevent leakage;

of **levees, floodwalls, hurricane barriers, embankments, walls, in-channel structures, and other flood damage reduction structures to protect areas from inundation; and snagging, clearing, debris removal, and non-dredging flood damage reduction channel maintenance.** This includes direct costs for removal of trees, brush, accumulated snags, drifts, and debris from canals and waterways for flood damage reduction and major drainage purposes; and channel improvement structures and revetments, linings, dikes, jetties, bulkheads, and buildings (when provided for flood damage reduction);

of **pumping plants** including such items as buildings, pumps, and prime movers including power supplies, controls, piping, and all other associated facilities;

of **buildings, grounds, utilities, and roads, railroads and bridges,** such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes direct costs for project utilities including electrical, gas, water, and sewer systems;

of **permanent operating equipment;**

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

and for **instrumentation on dam structures and levees, floodwalls, hurricane barriers, and other flood damage reduction structures** including all costs for the installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE: **61212** - Maintenance of Dikes, Revetments, Breakwaters and Similar Structures for Mississippi River and Tributaries (MR&T) Flood Damage Reduction

WORK CATEGORY DESCRIPTION: Maintenance of Dikes, Revetments, Groins, Breakwaters, Jetties, Seawalls and Similar Structures for MR&T flood damage reduction purposes.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of revetments, dikes, groins, breakwaters, seawalls, piers, linings, training dikes, bulkheads and similar structures. Also includes related costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs, equipment usage, associated government plant and hired labor for project maintenance, contract support, and other costs.

WORK CATEGORY CODE: **61221** - Dredging Activities for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Dredging of Channels and Canals for flood damage reduction activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all costs for dredging, excavation and disposal activities for the maintenance and efficiency improvements of channels and canals for flood damage reduction purposes, except project condition sediment survey costs which are included in Work Category Code 60221. Includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; and creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

**61222** - Dredging - Construction and Maintenance of Disposal  
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Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: Facilities for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for flood damage reduction features.

Includes all costs for the construction and the maintenance of dredged material disposal facilities including confined disposal facilities, and required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61230**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61240** - Water Management (Control and Quality) Equipment for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for flood damage reduction features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.



Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61251** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for flood damage reduction features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61252** - Real Estate - Resolution of Real Estate Encroachments for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for flood damage reduction features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61253.

WORK CATEGORY CODE: **61253** - Real Estate - Boundary Monumentation and Rectification for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for flood damage reduction features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61260** - Environmental Compliance (Remedial Actions) for the Flood Damage Reduction Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Dams, Breakwaters, Jetties, Seawalls, Levees, Floodwalls, Hurricane Barriers, Other Flood Damage Reduction Structures, Pumping Plants, Other Facilities, Channels and Canals for flood damage reduction features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for dams, breakwaters, jetties, seawalls, levees, floodwalls, hurricane barriers, other flood damage reduction structures, pumping plants, other facilities, channels and canals. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental compliance assessment manuals. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must also include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **61270**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61280**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61290**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61310 (61311-61314)** - Baseline Maintenance for the Hydropower Function Costs for this function will be sub-divided as follows:

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

**61311** - Baseline Maintenance Supervision, FERC #541. Costs for labor, materials and expenses incurred in the general supervision of maintenance of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**61312** - Baseline Maintenance of Hydraulic Structures, FERC #542. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the powerhouse, and power intake works whether or not the powerhouse is an integral part of the intake dam;

**61313** - Baseline Maintenance of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant generating and accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

**61314** - Baseline Maintenance of Miscellaneous Hydraulic Plant, FERC #545. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant and switchyard hydraulic plant.

WORK CATEGORY DESCRIPTION: Baseline Maintenance of Power Plants, excluding dredging for hydropower features.

Includes all Baseline costs for power plant maintenance and repair, replacements, additions and efficiency improvements to, and retirement of all power plant structures; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; and of lighting and interior power distribution systems, cable tunnels and conduit runs; and installation of instrumentation. Includes spare parts, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. Includes labor and materials, and incidental expenses incurred to maintain maintenance records; expenses incurred by the power plant management and support staff in the general supervision of the maintenance of the hydraulic generating station; and transportation and per diem costs required to perform power plant maintenance functions. Dredging is included in Work Category Code 61320. See Work Category Code 613N0 (613N1-613N4) for Non-Baseline accounts.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **613N0 (613N1-613N4)** - Non-Baseline Maintenance for the Hydropower Function Costs for this function will be sub-divided as follows:

**613N1** - Non-Baseline Maintenance Supervision, FERC #541. Costs for labor, materials and expenses incurred in the general supervision of maintenance of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**613N2** - Non-Baseline Maintenance of Hydraulic Structures, FERC #542. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the powerhouse, and power intake works whether or not the powerhouse is an integral part of the intake dam;

**613N3** - Non-Baseline Maintenance of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant generating and accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

**613N4** - Non-Baseline Maintenance of Miscellaneous Hydraulic Plant, FERC #545. Costs for labor, materials and expenses incurred in the maintenance, repair, replacement, additions and efficiency improvements to, and retirement of the power plant and switchyard hydraulic plant.

WORK CATEGORY DESCRIPTION: Non-Baseline Maintenance of Power Plants, excluding dredging for hydropower features.

Includes all Non-Baseline costs for power plant maintenance and repair, replacements, additions and efficiency improvements to, and retirement of all power plant structures; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; of lighting and interior power distribution systems, cable tunnels and conduit runs; and installation of instrumentation. Includes spare parts, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. Includes labor and materials, and incidental expenses incurred to maintain maintenance records; expenses incurred by the power plant management and support staff in the general supervision of the maintenance of the hydraulic generating station; and transportation and per diem costs required to perform power plant maintenance functions. Dredging is included in Work Category Code 61320. See Work Category Code 61310 (61311-61314) for Baseline accounts.

WORK CATEGORY CODE: **61320** - Dredging Activities for the Hydropower Function, FERC #543

WORK CATEGORY DESCRIPTION: Dredging for hydropower activities including all disposal activities.

Includes all costs for maintenance dredging and disposal activities, except project condition sediment survey costs which are included in Work Category Code 60321. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61330**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61340** - Water Management (Control and Quality) Equipment for the

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**  
Hydropower Function, FERC #542

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for hydropower features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61351** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for hydropower features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management, which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61352** - Real Estate - Resolution of Real Estate Encroachments for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for hydropower features.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. The costs for boundary line surveys and remarking are not included in this Work Category.

WORK CATEGORY CODE: **61353** - Real Estate - Boundary Monumentation and Rectification for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for hydropower features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61360** - Environmental Compliance (Remedial Actions) for the Hydropower Function, FERC #545

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for Dams, Levees, Other Control Structures, Power Plants, Pumping Plants, and Other Facilities for hydropower features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for dams, levees, other control structures, power plants, pumping plants, and other facilities. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental compliance assessment manuals. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must also include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **61370 (61371-61374)** - O&M Major Rehabilitation Projects for the Hydropower Function Costs for this function will be further sub-

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**  
divided as follows:

**61371** - Comprehensive Replacement Supervision, FERC #541. Costs for labor, materials and expenses incurred in the supervision of the comprehensive replacement of hydraulic power generating stations. Direct supervision of specific jobs is charged to the appropriate maintenance feature;

**61372** - Comprehensive Replacement of Structures, FERC #542. Costs for labor, materials and expenses incurred in the comprehensive replacement of the powerhouse, switchyard, and power intake works whether or not the powerhouse is an integral part of the intake dam;

**61373** - Comprehensive Replacement of Electric Plant, FERC #544. Costs for labor, materials and expenses incurred in the comprehensive replacement of the power plant generating and accessory electrical and mechanical equipment, and switchyard electrical and mechanical equipment;

**61374** - Comprehensive Replacement of Miscellaneous Hydraulic Plant, FERC # 545. Costs for labor, materials and expenses incurred in the comprehensive replacement of the power plant and switchyard hydraulic plant.



Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

**WORK CATEGORY DESCRIPTION:** Remaining O&M Funded Major Rehabilitation (Comprehensive Replacement) projects for hydropower features.

Includes all costs for comprehensive major rehabilitation, replacement, repair, additions and efficiency improvements, including supervision, of all power plant structures, electric plant, miscellaneous hydraulic plant, power plant intake works; of facilities and equipment required for production, transmission, and distribution of electrical power, including but not limited to the power plant, spillway, low flow bypass systems, storage facilities, turbines, motors, pumps, generators, and governors; of all accessory electrical or electronic equipment and control systems; of all water, air, and oil systems; of all intake structures with electrical and mechanical equipment; of the tailrace, switchyard, transformer yard, elevators, trash racks; and of lighting and interior power distribution systems, cable tunnels and conduit runs. Includes labor and materials, special and regular tools, supplies and equipment, scaffolding, and rental of specialized equipment. See Work Category Codes 61310 (61311-61314) and 613N0 (613N1-613N4).

**NOTE:** Major Rehabilitation work is now funded under the Construction, General (CG) appropriation. Work items for Major Rehabilitation Evaluation Reports are included in Work Category Code 60325. This Work Category will be used only until current O&M funded Major Rehabilitation projects are completed.

**WORK CATEGORY CODE: 61380**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE: 61390**

**WORK CATEGORY DESCRIPTION:** Reserved.

**WORK CATEGORY CODE: 61411 - Maintenance of Natural Resource Facilities**

**WORK CATEGORY DESCRIPTION:** Maintenance of Natural Resource Facilities.

Includes all costs to perform maintenance needed to conserve and protect natural resources and associated facilities located on project lands. This Work Category only includes costs during the conservation or protection effort.

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Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61412** - Mitigation of Archeological and Cultural Resources

WORK CATEGORY DESCRIPTION: Mitigation of Archeological and Cultural Resources such as Sites, Structures, and Objects.

Includes all costs to manage, curate, maintain and rehabilitate identified archeological collections and associated documentation and long term collections management. Also includes cultural resources mitigation costs to protect, recover, preserve or otherwise mitigate significant archaeological, historical, and cultural buildings, sites, structures or objects. This Work Category only includes costs during the recovery, preservation, or mitigation effort.

WORK CATEGORY CODE: **61413** - Maintenance of Wildlife Mitigation Features

WORK CATEGORY DESCRIPTION: Maintenance of Wildlife Mitigation Features.

Includes all costs for the maintenance and repair of wildlife mitigation features to comply with Federal laws and mitigation requirements to offset losses caused by existing and new project activities. This Work Category only includes costs during the mitigation effort.

WORK CATEGORY CODE: **61414** - Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures

WORK CATEGORY DESCRIPTION: Maintenance of Fisheries, Fish Haulage Activities and Fish Passage Structures for environmental stewardship features.

Includes all costs for maintenance and repair of fish hatcheries, egg collection stations, transportation equipment, and fish passage facilities.

WORK CATEGORY CODE: **61421** - Dredging Activities for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Dredging of Channels and Canals for environmental stewardship activities including all disposal activities. Disposal activities include, but are not limited to, confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

Includes all costs for maintenance dredging of project channels and canals, and disposal activities, except project condition sediment survey costs which are included in Work Category Code 60420. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. This Work Category also includes all costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; creation or restoration of wetlands or other aquatic habitat using dredged material; and creation of land using dredged material. Also includes related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE: **61422** - Dredging - Construction and Maintenance of Disposal Facilities for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Construction and Maintenance of Disposal Facilities for Dredged Materials for environmental stewardship features.

Includes all costs for the construction and the maintenance of disposal facilities including confined disposal facilities, and required real estate activities. Also includes related costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61430**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61440** - Water Management (Control and Quality) Equipment for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for environmental stewardship features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments, or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the new Corps Water Management System (CWMS). This also includes costs for maintenance and support of CWMS.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61451** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for environmental stewardship features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management which is included in Work Category Code 60411.

WORK CATEGORY CODE: **61452** - Real Estate - Resolution of Real Estate Encroachments for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for environmental stewardship features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61453.

WORK CATEGORY CODE: **61453** - Real Estate - Boundary Monumentation and Rectification for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for environmental stewardship features.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61460** - Environmental Compliance (Remedial Actions) for the Environmental Stewardship Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) of Natural Resources including Other Service Facilities for environmental stewardship features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for natural resources and other environmental stewardship features. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental compliance assessment manuals. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must also include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **61470**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61480**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61490**

WORK CATEGORY DESCRIPTION: Reserved.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61511** - Maintenance of Recreation Features

WORK CATEGORY DESCRIPTION: Maintenance of Recreation areas and Facilities, Visitor Centers, Service Facilities – (Buildings, Grounds, Utilities, Roads and Bridges), Erosion Control in Recreation Areas, and Maintenance and Purchase of Permanent Operating Equipment for recreation features.

Includes all costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of, visitor center buildings, displays, audiovisual systems, heating and cooling systems, landscaping, grounds, exhibits and utilities; recreation facilities and structures such as grills, tables, playgrounds, trails, campgrounds, picnic areas, restrooms, showers, boat ramps, parking areas, roads, grounds, utilities associated with recreation use, buildings used for recreation purposes or the collection of fees and other structures used to support the recreation function. Also included are the costs for realignment, overlay, grading, and widening, of roads, parking areas, bridges and walkways associated with recreational development, and all costs for control of erosion endangering recreational areas or facilities, including seeding, sodding, riprap, gabions, vegetation, retaining walls and other measures. Also includes the costs for permanent operating equipment such as backhoe, trencher, bucket truck, tractor loader, vehicles, communications equipment, and computers used to support the recreation function of the project. This Work Category also includes costs for spare parts, replacements, additions, special tools, miscellaneous materials and supplies, transportation costs and equipment usage, and costs to bring facilities up to modern design standards and to provide ~~handicap~~ universal accessibility for persons with disabilities as required.

Costs for E&D plans and specifications for the Recreation Modernization Program should be included here.

This work category includes costs previously included in WCC 61512, Maintenance of Recreation Facilities using SRUF funds (see paragraph C-2.15 SRUF).

SRUF costs previously included under WCC 61512 should now be included under WCC 61511.

WORK CATEGORY CODE: **61513** - Maintenance of Recreation Features - Cost Shared Recreation Developments

WORK CATEGORY DESCRIPTION: Cost Shared Recreation Developments - Contracts and Negotiations.

Includes all recreation cost share agreements and contract costs; costs to reimburse local sponsors; and costs for monitoring and negotiating agreements related to cost sharing.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61520** - Dredging Activities for the Recreation Function

WORK CATEGORY DESCRIPTION: Dredging for recreation activities including all disposal activities.

Includes all costs for maintenance dredging and disposal activities for the recreation function, except project condition sediment survey costs which are included in Work Category Code 60520. It also includes the costs for before, during and after dredging surveys, required real estate activities, E&D, S&A, etc. Also included are costs to obtain environmental clearances to perform the associated dredging. Also includes all costs associated with the disposal of dredged materials as sand on beaches, and related costs for spare parts, special tools, miscellaneous materials and supplies, transportation, disposal, and equipment.

WORK CATEGORY CODE **61530**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61540** - Water Management (Control and Quality) Equipment for the Recreation Function

WORK CATEGORY DESCRIPTION: Purchase and Maintenance of Water Management (Control and Quality) Equipment for recreation features.

Includes all costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality) for the recreation function. This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the Corps new Water Management System (SWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61551** - Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for the Recreation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits for recreation features.

Includes all costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

dispose of lands and interests. Also includes real estate payments for acquisition of real property and interests therein. Costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired. Includes all administrative costs incurred in connection with timber disposal in support of forest management activities, such as contract administration, and inspection, but excludes the staff supervision of timber management which is included in Work Category Code 60411.

WORK CATEGORY CODE:     **61552** - Real Estate - Resolution of Real Estate Encroachments for the Recreation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Resolution of Real Estate Encroachments for recreation features.

Includes all costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting. Costs for boundary line surveys and remarking are included in Work Category Code 61553.



Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61553** - Real Estate - Boundary Monumentation and Rectification for the Recreation Function

WORK CATEGORY DESCRIPTIONS: Real Estate - Boundary Monumentation and Rectification for recreation features.

Includes all costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions, and costs to survey and mark boundary lines where not previously completed. Under normal circumstances there will be no work items in the Baseline funding level for this Work Category.

WORK CATEGORY CODE: **61560** - Environmental Compliance (Remedial Actions) for the Recreation Function

WORK CATEGORY DESCRIPTION: Environmental Compliance (remedial actions) for recreation features.

Includes all maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for recreation facilities and visitor centers. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental compliance assessment manuals. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must also include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

WORK CATEGORY CODE: **61570**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61580**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61590**

WORK CATEGORY DESCRIPTION: Reserved.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61610** - Joint Activities for Maintenance excluding Dredging, FERC #541, #542, #543, #544 and #545

WORK CATEGORY DESCRIPTION: Joint costs for Maintenance activities NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation. These activities include maintenance of Dams, Reservoirs, Levees, Floodwalls, Hurricane Barriers, and Other Control Structures; Snagging, Clearing, Aquatic Plant Removal, Rock and Other Debris Removal, and Other Non-Dredging Channel Maintenance; Pumping Plants, Other Service Facilities (Buildings, Grounds, Utilities, and Roads, Railroads and Bridges), Maintenance and Purchase of Permanent Operating Equipment, etc. excluding dredging.

Includes all joint costs for the maintenance and repair, replacement, additions and efficiency improvements to, or retirement of; related joint costs for spare parts, replacements, additions, special tools, miscellaneous supplies and materials; government plant and hired labor for project maintenance and contract support, transportation costs and other costs required to perform this maintenance function; purchase of permanent operating equipment:

of joint use facilities and equipment for **dams, spillways, outlet works and auxiliary dams;**

of **reservoirs and facilities** including floating trash booms, trash racks, erosion control, drainage, major periodic or one time removal of debris or aquatic growth to ensure proper functioning of the reservoir (minor and routine removal of growth and debris in the vicinity of dam structures and from reservoirs should be charged to Work Category Code 60610); and rim grouting or mine sealing, etc., to prevent leakage;

of **levees, floodwalls, hurricane barriers, embankments, walls, in-channel structures, and other control structures to protect areas from inundation; snagging, clearing, debris removal; and non-dredging channel maintenance.** This includes costs for removal of trees, brush, accumulated snags, drifts, and debris from canals and waterways; and channel improvement structures, revetments, linings, dikes, jetties, bulkheads, and buildings;

of **pumping plants** including such items as buildings, pumps, and prime movers including power supplies, controls, piping, and all other associated facilities;

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

of **non-dredging channel maintenance** including snagging, clearing, aquatic plant removal, removal of sunken vessels, drift removal, rock and other debris removal;

of **buildings, grounds, utilities, and roads, railroads and bridges**, such as administration and shop buildings, storage and garage buildings and areas, other non-leased or rented project buildings, local streets and sidewalks, project access roads, including the road across dams, parking areas, bridges, railroads, and walkways. Also includes costs for project utilities including electrical, gas, water, and sewer systems;

of **permanent operating equipment**;

and for **instrumentation on dam structures, levees, floodwalls, hurricane barriers, and other control structures** including costs related to installation and maintenance of instruments in existing structures for safety evaluation purposes consistent with an approved plan. This includes instrumentation for measuring horizontal and vertical movement, stresses and strains, pore pressure, phreatic surfaces, seismic effects, and seepage clarity and quality.

WORK CATEGORY CODE:     **61621** - Joint Activities for Dredging, FERC #543

WORK CATEGORY DESCRIPTION: Joint costs for Dredging of Channels and Canals NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation. These activities include all disposal activities such as confined, open water, beach, wetland creation, aquatic habitat creation, etc.

Includes all joint costs for maintenance dredging of project channels and canals, and disposal activities, except for project condition sediment survey costs which are included in Work Category Code 60621. Also included are joint costs to obtain environmental clearances to perform the associated dredging. Long-range environmental requirements and costs for initial project condition surveys are included in related operations accounts. Also includes joint costs associated with the disposal of dredged materials in confined disposal facilities; open water; sand on beaches; the creation or restoration of wetlands or other aquatic habitat using dredged material; and the creation of land using dredged material. Also includes related joint costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE:     **61622** - Joint Activities for Dredging - Construction and Maintenance of Dredged Material Disposal Facilities, FERC #543

WORK CATEGORY DESCRIPTION: Joint costs for the Construction and Maintenance of Disposal Facilities for Dredged Materials NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for the construction and the maintenance of disposal facilities, including

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

confined disposal facilities, for dredged materials. Also includes related joint costs for spare parts, replacements, special tools, miscellaneous materials and supplies, transportation and equipment usage.

WORK CATEGORY CODE: **61630**

WORK CATEGORY DESCRIPTION: Reserved

WORK CATEGORY CODE: **61640** - Joint Activities for Water Management Equipment, FERC #542

WORK CATEGORY DESCRIPTION: Joint costs for the Purchase and Maintenance of Water Management (Control and Quality) Equipment NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for the purchase of new or replacement hardware, software, and equipment (upgrades, betterments or expansion) and the maintenance of existing equipment used to acquire, process, display, and distribute data associated with project water management and regulation (water control and quality). This includes only those costs related to equipment justified in approved Division water management Master plans. Purchase of multi-project equipment will be included in the Revolving Fund (PRIP). This includes PRIP payback for equipment purchase, software development, and system betterment for the Corps new Water Management System (SWMS). This also includes costs for maintenance and support of CWMS.

WORK CATEGORY CODE: **61651** - Joint Activities for Real Estate - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Land Acquisition and Disposal Management Activities, Settlement of Claims, and Audits NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for planning, appraisal, negotiation, condemnation, relocation assistance, mapping, surveying, title evidence, inspections, closings, audits and temporary permits necessary to acquire or dispose of lands and interests, real estate payments for acquisition of real property and interests therein, and costs to take necessary actions to settle claims, including damage payments arising from claims over the use and occupancy of land, real property and timber in which fee, easements, or lesser interests were not acquired.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61652** - Joint Activities for Real Estate - Resolution of Real Estate Encroachments, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Resolution of Real Estate Encroachments NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs for the resolution of all encroachments on project lands, and degradation of public lands and encroachments adversely affecting the intended uses of potentially high use areas; including investigation, acquisition, disposal, and out-granting.

WORK CATEGORY CODE: **61653** - Joint Activities for Real Estate - Boundary Monumentation and Rectification, FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Real Estate activities - Boundary Monumentation and Rectification NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation.

Includes all joint costs to survey and mark boundary lines in support of acquisition; to resurvey or remark boundary lines and place monuments in support of Executive Order actions and disposal actions; and costs to survey and mark boundary lines where not previously completed.

WORK CATEGORY CODE: **61660** - Joint Activities for Environmental Compliance (Remedial Actions), FERC #545

WORK CATEGORY DESCRIPTION: Joint costs for Environmental Compliance (remedial actions) NOT specific to Navigation, Flood Damage Reduction, Hydropower, Environmental Stewardship, and Recreation. These activities include actions for Dams, Levees, Other Control Structures, Pumping Plants and Other Project Facilities.

Includes all joint costs maintenance, repair and remediation costs to comply with applicable Federal laws and regulations, including the Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Clean Air Act, Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and applicable state and local regulations for dams, reservoirs, levees, other control structures, pumping plants and other joint use project facilities. Federal, DOD and Corps of Engineers requirements are described in the ERGO/TEAM environmental compliance assessment manuals. Costs include salaries, contaminant detection, waste analysis, site investigations, site remediation, treatment system installation, repair, renovation, modification, and other costs associated with compliance. Costs associated with medical surveillance and other employee health and safety requirements are not included. Environmental compliance program requests must also include the mandatory data elements of the FEDPLAN Report authorized by Executive Order 12088.

Table C-2.3d  
Work Category Codes and Definitions

**O&M Maintenance Accounts**

WORK CATEGORY CODE: **61670**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61680**

WORK CATEGORY DESCRIPTION: Reserved.

WORK CATEGORY CODE: **61690**

WORK CATEGORY DESCRIPTION: Reserved.

TABLE C-2.4

SUBMISSION REQUIREMENTS

ILL. NO.	ITEMS	HARD COPY	ADP	NO. COPIES	DUE DATE (NLT)
	Work package information into computer		X	N/A	15 May 2000
	Final MSC rankings into computer		X	N/A	12 June 2000
	Baseline Level PB-2a For Major Rehabilitation Projects. (Reduced to 8 1/2" x 11")	X		4	30 June 2000 (See Appendix B)
	Evaluation Reports for Major Rehabilitation Projects	X		3	15 March 2000
B-2.4	BY Justification Sheet for Major Rehabilitation Projects			N/A	1 June 2000 (See Appendix A)
C-2.1	Supplemental Justification Major Maintenance			3	12 June 2000
C-2.2	Supplemental Justification Dredged Material Management Plan	X		3	30 June 2000
C-2.3	Worksheet For Five-Year Funding Program	X		N/A	3/
C-2.4	Five-Year Program			N/A	3/
C-2.5	Justification of Estimates (Congressional Submission)		X	N/A	1/ 2/

1/ Precise suspense date for Congressional submission of Justification of Estimate Sheets will be the subject of later correspondence.

2/ Information required electronically in WordPerfect format as specified in relevant sections of this EC.

3/ For use by Districts and MSC's to develop five-year program. No submittal required.

**TABLE C-2.4**  
**OPERATION AND MAINTENANCE, GENERAL (O&M, Gen.)**  
**AND**  
**FLOOD CONTROL, MISSISSIPPI RIVER AND**  
**TRIBUTARIES (MAINTENANCE)(MR&T)**  
**TARGETS**  
(Dollars in Millions)

MSC	Program Year (PY) Targets
	Total PY Target
LRD	<del>356</del> 335.7
MVD	<del>354</del> 340.0
NAD	<del>499</del> 196.8
NWD	<del>226</del> 218.3
POD	<del>40</del> 10.2
SAD	<del>346</del> 294.7
SPD	<del>98</del> 97.5
SWD	<del>260</del> 256.0
<b>Total MSCs, O&amp;M, Gen.</b>	<b><del>1816</del>1749.2</b>
<b>FC, MR&amp;T (Maintenance)</b>	<b><del>140</del>148.8</b>

NOTES:

1. See narrative in Sub- appendix C-2 for guidance concerning program development and definition.
2. Current guidance from OMB places a low priority on navigational projects which carry little or no commercial traffic, citing in particular, (a) shallow draft harbors and (b) maintenance of inland waterway (IWW) projects carrying less than one billion ton-miles of commodity flow per year (<1btm). Although OMB allowed some funding for the most commercially active shallow draft Harbors and <1btm IWW projects in FY02, work packages for all others will be automatically reduced or eliminated during the HQUSACE program development process. Therefore, MSC's are advised not to place such work packages within their ceilings or baselines.



<b>TABLE C-2.5</b> <b>TIER II PERFORMANCE MEASURES</b> <b>For O&amp;M PROGRAM SUBMITTAL</b>				
<b>ENTRY #</b>	<b>PROPONENT MANAGER</b>	<b>BUSINESS FUNCTION</b>	<b>PERFORMANCE MEASURE</b>	<b>FY GOAL</b>
1	CECW-OD Barry Holliday 202-761-4741	Navigation	Percent Time Achieve Purpose - Coastal	90%
2	CECW-OD Barry Holliday 202-761-4741	Navigation	Percent Time Achieve Purpose - Inland	95%
3	CECW-OD Barry Holliday 202-761-4741	Flood Damage Reduction	Availability	95%
4	CECW-OD Barry Holliday 202-761-4741	Hydropower	Forced Outage	less than 4.5%
5	CECW-OD Barry Holliday 202-761-4741	Hydropower	Unit Availability	90%
6	CECW-ON Darrell Lewis 202-761-4690	Recreation	Percent Cost of Recreation Program Recovered	20%
7	CECW-ON Darrell Lewis 202-761-4690	Recreation	Customer Satisfaction with Quality of Facilities & Services	90%
8	CECW-ON Darrell Lewis 202-761-4690	Environmental – Natural Resources	Mitigation Lands meeting Requirements	70%
9	CECW-ON Darrell Lewis 202-761-4690	Environmental – Natural Resources	Recovery of Federally Listed Species	30%
10	CECW-ON Janice Smith 202-761-4657	Environmental – Compliance	a. Significant Findings Corrected b. Major Findings Corrected	a.100% b. 75%

**Tier II Performance Measure #1**

**NAVIGATION PERFORMANCE MEASURE - HARBORS**

**PURPOSE:** To provide safe, reliable, and efficient waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation.

The harbors include both the deep draft (>14 feet depth) and shallow draft waterborne transportation system consisting of ports, harbors, channels, and waterways, including the harbors of the inland waterways, whose maintenance costs are reimbursed from the Harbor Maintenance Trust Fund.

The goal for the harbors is all harbors will achieve their acceptable level of service 90 percent of the time during the established navigation season.

The essence of these performance measures involves seeking a mutual agreement with the users/local sponsors/stakeholders as to what is an acceptable level of service. Your respective goal should be achieving 100 Percent of that agreed upon level of service based on appropriated and reprogrammed project funds. Thus you will be tying your performance to your program, appropriated and reprogrammed project funds, with an acceptable level of service to your customers.

There are several scenarios in achieving your respective goals.

For the harbors, the main activity will be dredging and dredged material disposal to maintain channel dimensions. Some projects will have jetties, breakwaters, and other structures as additional features of the project to maintain as part of project performance. For most of the deep draft projects, the stakeholders will seek to negotiate full project dimensions, 100 Percent of the time. In many projects, this will be possible with annual appropriated and reprogrammed project funds. Some projects, due to environmental windows, disposal constraints, seasonal weather conditions, or differing sediment characteristics below project depth, can not be maintained at full project dimensions 100 Percent of the time. You need to strive to achieve an acceptable level of service that is reasonable and justified with respect to commercial vessel users not exceeding design vessel dimensions for the constructed project channels. Local sponsor and/or vessel operator complaints concerning available channel dimensions for vessels that exceed the constructed channel dimensions, will not be considered in the acceptable level of service.

## **Tier II Performance Measure #2**

### **NAVIGATION PERFORMANCE MEASURE - INLAND WATERWAYS**

**PURPOSE:** To provide safe, reliable, and efficient waterborne transportation systems (channels and waterways) for movement of commerce, national security needs, and recreation.

The inland waterways are the waterborne transportation system consisting of channels, locks, and pools of the inland rivers and the intra-coastal channels along the Atlantic and Gulf coasts that support commerce, national security needs, and recreation. Commercial transportation on these waterways is subject to the Inland Waterways Fuel Tax.

The goal for the inland waterways is all inland waterways projects will achieve their acceptable level of service 95 percent of the time during the established navigation season.

The essence of these performance measures involves seeking a mutual agreement with the users/local sponsors/stakeholders as to what is an acceptable level of service. The goal should be achieving 100 Percent of that agreed upon level of service based on appropriated and reprogrammed project funds. Thus you will be tying your performance to your program, appropriated and reprogrammed project funds, with an acceptable level of service to your customers.

There are several scenarios in achieving these goals.

For the inland waterways, the project can include several activities, including lock operations, dredging/channel maintenance, and water control structures. If a lock is not available for 95 Percent of the time, but the channels are at project dimensions for 100 Percent of the time, you have not met your goal. All project features will influence attaining the goal. In the event of a natural disaster (flooding), where either the U.S. Coast Guard or the Corps has closed the project channel/locks or a portion of the project channel to navigation, this will be an exception and not included in the 95 percent availability. Scheduled or unscheduled closure, during the established navigation season, which are not due to a natural disaster, will be considered in the 95 percent availability. There also may be projects where the need for waterborne transportation is seasonal, and you may develop a level of service acceptable to the stakeholders that allows the channels to shoal in during the non-navigation season, and still attain 100 Percent of your project acceptable level of service.

**Tier II Performance Measure #3**

**FLOOD DAMAGE REDUCTION (FDR) PERFORMANCE MEASURE**

<b>Corporate Goal:</b>	100 Percent Availability
<b>Customers:</b>	People directly affected by the Corps Civil Works flood damage reduction system. Taxpayers
<b>Measure:</b>	Project Availability
<b>Definition:</b>	The number of days a project is one hundred percent (100 Percent) operational to perform its flood damage reduction function. "operational" means the project's features are fully functioning as designed and constructed or can be made functional (i.e., using backup systems) if needed in response to a spillway design type flood event. If a project feature is down for whatever reason and cannot be made functional in time to respond to a flood event then the project is unavailable for that day. "features" include but are not limited to, dams, levees, embankments, dikes, gates, spillways, channels and outlet structures.
<b>Demonstrates:</b>	The effectiveness of the FDR system to provide national benefits, and a level of maintenance over time. Government managers may interpret the data from this measure in order to allocate resources in support of the FDR mission.
<b>Unit of Output:</b>	The number of days in a fiscal year quarter a project is in compliance with the definition. The days are rolled up into District, MSC and Corps values expressed as a percentage of the total days within the quarter.
<b>Data Source:</b>	Quarterly data calls from HQUSACE proponent to MSCs.

**Tier II Performance Measure #4**

**HYDROPOWER PERFORMANCE MEASURE**

<b>Program Goal:</b>	Maintain a high degree of hydroelectric generating unit availability.
<b>Corporate Goal:</b>	The goal is for the forced outages to be less than 4.5 Percent. This will be refined as power industry data is analyzed.
<b>Measure:</b>	Forced outages.
<b>Definition:</b>	The percentage of time that generating units are not available because of unforeseen circumstances. This percentage is determined by dividing the unplanned outages hours by the total hours in the period. A low unplanned outage percentage demonstrates a high degree of reliability of the hydropower plants. It also reduces the cost to the customer in that they do not have to go to more expensive alternative sources. For demonstration purposes this measure will be displayed as the traditional unplanned outage percentage (industry averages available) and as a Megawatt capacity weighted unplanned outage percentage (no industry averages available).

**Tier II Performance Measure #5**

**HYDROPOWER PERFORMANCE MEASURE**

<b>Program Goal:</b>	Maintain a high degree of hydroelectric generating unit availability.
<b>Corporate Goal:</b>	The goal for unit availability is 90 Percent. This will be refined as power industry data is analyzed.
<b>Measure:</b>	Unit availability.
<b>Definition:</b>	Unit availability is the total available hours of all generator units divided by the total hours in the period (expressed as a percentage).

**Tier II Performance Measure #6**

**RECREATION PERFORMANCE MEASURE**

<b>Program Goal:</b>	To provide outdoor recreation opportunities in an effective and efficient manner.
<b>Corporate Goal:</b>	20 Percent
<b>Measure:</b>	Percent Cost of Recreation Program Recovered
<b>Customer:</b>	The public
<b>Definition:</b>	Revenues generated by the Corps recreation programs divided by the costs of providing those programs. Revenues include commercial concession receipts, user fee receipts, and quasi public recreation receipts. Costs include WCCs 605xx and 615xx, and the recreation allocation of 606xx and 616xx, where applicable.
<b>Demonstrates:</b>	Corps effectiveness of implementation of the user fee program.
<b>Data Source:</b>	CEFMS, NRMS, REMIS

**Tier II Performance Measure #7**

**RECREATION PERFORMANCE MEASURE**

<b>Program Goal:</b>	To provide continued outdoor recreation opportunities to meet the needs of present and future generations.
<b>Corporate Goal:</b>	90 Percent of customers rating facilities and services as acceptable or better for the price.
<b>Customer:</b>	The public
<b>Measure:</b>	Customer satisfaction with quality of facilities and services.
<b>Demonstrates:</b>	Corps effectiveness in providing quality recreation facilities and services to meet customer needs.
<b>Data Source:</b>	Customer Satisfaction Survey



**Tier II Performance Measure #8**

**ENVIRONMENTAL - NATURAL RESOURCES PERFORMANCE MEASURE**

**Program Goal:** Corps mitigation outputs meet the requirements of authorizing legislation or relevant Corps decision document.

**Corporate Goal:** 70 Percent of Corps administered mitigation lands (acres) achieving Corps mitigation requirements.

**Customer:** The Public

**Measure:** Percent of Corps administered mitigation lands (acres) meeting the requirements in the authorizing legislation or relevant Corps of Engineers decision document.

**Definition:** Number of designated Corps administered mitigation lands (acres) meeting mitigation requirements divided by the total number of designated Corps administered mitigation lands (acres).

Mitigation lands: Mitigation lands are those lands on which mitigation measures are taken to compensate for adverse ecological impacts unavoidably caused by Corps projects or activities. For the performance measure, these lands are those authorized by Congress or approved by HQUSACE in a formally documented decision.

Corps administered lands: Corps lands either managed by the Corps, or lands licensed, permitted or leased from the Corps.

**Demonstrates:** Status of Corps efforts to meet mitigation requirements.

**Data Source:** Operational Management Plans, Natural Resources Management System - data fields to be determined.

**Tier II Performance Measure #9**

**ENVIRONMENTAL - NATURAL RESOURCES PERFORMANCE MEASURE**

<b>Program Goal:</b>	Assist in the recovery of Federally listed species.
<b>Corporate Goal:</b>	Accomplish Recovery Plan requirements for 30 Percent of Federally listed species identified in those Recovery Plans which designate the Corps as having recovery requirements.
<b>Customer:</b>	The Public.
<b>Measure:</b>	Percent of Federally listed species with final Fish and Wildlife Service (FWS)/ National Marine Fisheries Service (NMFS) Recovery Plans for which Corps is accomplishing ascribed FWS/ NMFS Recovery Plan requirements.
<b>Definition:</b>	Number of species with final FWS/NMFS Recovery Plans for which the Corps is accomplishing ascribed FWS/NMFS Recovery Plan requirements divided by the number of species for which the Corps has recovery requirements specified in final FWS/NMFS Recovery Plans.
<b>Demonstrates:</b>	Corps accomplishment of its responsibilities in FWS/ NMFS Federally listed species Recovery Plans.
<b>Data Source:</b>	FWS, NMFS, Initial field data call, NRMS-data fields to be determined.

**Tier II Performance Measure #10**

**ENVIRONMENTAL - COMPLIANCE PERFORMANCE MEASURE**

**Program Goal:** Assure that all CW facilities and associated lands (including outgranted areas) comply with environmental requirements contained in relevant Federal, state and local laws and regulations.

**Corporate Goal:**

- a. Significant findings 100 Percent
- b. Major findings 75 Percent

**Measure:**

- a. Percent significant findings corrected vs number identified. (Significant findings require immediate attention. They pose, or have a high likelihood of posing a direct and immediate threat to human health, safety, the environment, or the mission.)
- b. Percent major findings corrected vs number identified. (Major findings require action but not necessarily immediate attention. They may pose a threat to human health, safety, or the environment.)

**Definition:** The number of corrected significant and major findings at Corps operated projects and facilities, not including outgrants, divided by the sum total of significant findings identified as a result of TEAM-ERGO compliance assessments, regulator inspections, daily operating activities, and any uncorrected significant findings from previous years.

**Demonstrates:** Annual compliance with environmental laws and regulations is being accomplished.

**Unit of Output:** Percent

**Data Source:** MSCS/districts/facilities ERGO assessment data.

**ILLUSTRATION C-2.1**  
**XXXXXXXXXXXX MAJOR SUBORDINATE COMMAND (MSC)**  
**SUPPLEMENTAL JUSTIFICATION SHEET**  
**MAJOR MAINTENANCE**

- (1) **DESCRIPTION OF WORK:** (Describe specific items of work to be included in the overall package.)
- (2) **JUSTIFICATION:** (Provide justification for the total work to be accomplished, including economic evaluation. Quantify benefits when possible. In last paragraph of justification, provide arguments on why the work should be started in the program year, either design or construction; and the impact of not starting the work in the program year. For ongoing work, include the impacts of not continuing the work in the program year. These paragraphs must be in sufficient detail to permit a decision to be made on the investment.)
- (3) **ESTIMATED COST AND SCHEDULE:** (Provide the basis of the estimated cost, i.e., based on cost of XYZ PROJECT IN FY 1990 indexed to current price levels, reconnaissance level estimate, e.g. *Design Memorandum D-28 approved 22 January 1993, etc*; and include the amount of contingencies included in the estimate. The cost estimate should be broken down to reflect individual DDRs, procurements, contracts, installations, etc. Schedule dates should be shown only to the month and year, e.g., 11/01, and all dollar amounts in even thousands, i.e., \$10,000 to be shown as 10. The estimate and schedule should include required fund requirements for engineering and design during construction and other related costs for completion of a total package. If contributed funds are required for Corps construction activities, include in cost estimate and add a line to the schedule with minus entries; so that the total line will reflect Total Federal fund requirements by year.)

This illustration is included to show the additional information required for major maintenance activities. This information will be provided in the format shown in the expanded funding argument field.

**ILLUSTRATION C-2.2**  
**XXXXXXXXXXXX MAJOR SUBORDINATE COMMAND**  
**SUPPLEMENTAL JUSTIFICATION SHEET**  
**DREDGED MATERIAL MANAGEMENT PLAN STUDIES**  
**(Dollars in Thousands)**

- (1) **PROJECT: (Name of Project and State -- Bold Type)** CWIS No.: \_\_\_\_\_
- (2) **DESCRIPTION OF STUDIES:** [Describe scope and depth of studies required to develop DMMP; state whether other Inter-related Federal projects are involved in study, and those projects, if any.]
- (3) **JUSTIFICATION:** [Provide justification for the total study to be accomplished. In last paragraph of justification, provide arguments on why the study should be started in the program year, and the impact of not starting the study in the program year. For ongoing studies, include the impacts of not continuing the work in the program year. These paragraphs must be in sufficient detail to permit a decision to be made on the investment, and should refer to the attached supplemental information sheet.]

(4) <b>ESTIMATED COST AND SCHEDULE:</b>													
[Provide the basis of the estimated cost. Schedule dates should be shown only to the month and year, e.g., 11/03, and all dollar amounts in even thousands, e.g. \$10,000 to be shown as 10. If contributed fund are required for Corps study activities, include in cost estimate and add a line to the schedule with minus entries; so that the total line will reflect Total Federal fund requirements by year.]													
Item	HL or Cont	Start Date	Compl Date	Total	Cost Thru	Fiscal Years							
						BY-2	BY-1	BY	BY+1	BY+2	BY+3	BY+4	Compl

- (4) **PROBLEMS:** [Include any factor or circumstances, other than Federal funding, which might affect the item. If problems exist, state the expectations for and timing of a resolution.]
- (5) **ADDITIONAL INFORMATION:** [Provide any additional information that applies to the work items. If local contributions are required, indicate status of agreement or evidence of intent to contribute.]

**ILLUSTRATION C-2.3**  
**DISTRICT/MS** \_\_\_\_\_  
**WORKSHEET FOR FIVE-YEAR PROGRAM**  
**(DOLLARS IN THOUSANDS)**

	PY	PY+1	PY+2	PY+3	PY+4
(1) <b>Total Funded Amount.</b> Estimate the total funded dollar amount within the district. Do not adjust for inflation.					
(2) <b>Baseline.</b> Estimate the size of your baseline in each program year. Do not adjust for inflation.					
(3) <b>Cyclic.</b> Estimate the amount of cyclic work scheduled in each program year. Includes periodic inspections, periodic lock dewatering, periodic maintenance, etc. Do not adjust for inflation.					
(4) <b>Continuing Contracts.</b> Estimate the amount of funded continuing contracts for each program year. Do not adjust for inflation.					
(5) <b>New Requirements.</b> Estimate the amount of funded work packages that were not submitted in the previous year's submittal (excluding the cyclic work in Line 3). Do not adjust for inflation.					
(6) <b>Funded Backlog.</b> Calculate by taking the total from Line (1) and subtracting Lines (2) through (5).					
(7) <b>Overprogrammed Backlog (3 Percent of Total Funding).</b> This value represents 3 Percent of Line 1, or \$1 million, whichever is greater.					
(8) <b>Total Scheduled Backlog.</b> This value represents the sum of Lines 6 and 7.					

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**ILLUSTRATION C-2.4**  
**DISTRICT/MS** \_\_\_\_\_  
**FIVE-YEAR PROGRAM**  
**PY+\_\_**

	Dollars in Thousands
FUNDED TOTAL	
Baseline	
Cyclic	
Continuing Contracts	
New Requirements	
Subtotal	

District	Description	
a.		
b.		
etc.		
Subtotal Funded Backlog packages less than \$100,000		
<b>Total Funded Backlog Packages</b>		
List Overprogrammed Backlog packages less than \$100,000		
Total Overprogrammed Backlog Packages		
<b>Total Scheduled Backlog</b>		

**ILLUSTRATION C-2.5a**  
**MAJOR SUBORDINATE COMMAND**  
**JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY   (PY)  

**I. Navigation**

**Channels and Harbors.** The program estimate of \$ \_\_\_\_\_ provides for essential operation and maintenance work on xx channel and harbor projects named in the list which follows. The work to be accomplished under this activity consists of operating and maintaining the coastal navigation channels, harbors and anchorages by means of dredging, constructing bulkheads and spoil disposal areas, snagging, and repairing channel stabilization works, navigation structures, and harbor jetties, all as authorized in the laws pertaining to river and harbor projects.

<b><u>ESTIMATED OBLIGATIONS</u></b>			
<b><u>(\$)</u></b>			
<b><u>State/Project Name</u></b>	<b><u>FY (PY-1)</u></b> <b><u>TOTAL</u></b>	<b><u>FY (PY)</u></b> <b><u>TOTAL</u></b>	<b><u>Reason for Change and Major Maintenance Items</u></b>
	(Operations) (Maintenance)	(Operations) (Maintenance)	1. Reasons for change in Operations from PY-1 to PY (10%+/-) 2. Major Maintenance Items Programmed in PY (Threshold \$ 1,000,000)
<b>Texas</b>			
Project A	0 (0) (0)	730,000 (0) (730,000)	1. None 2. Dredge navigation Channel
Project B	1,490,000 (0) (1,490,000)	2,145,000 (225,000) (1,920,000)	1. Perform surveys and monitoring activities. 2. Perform erosion protection on Disposal Area #3.
<b>Oklahoma</b> (Although not under <i>Navigation</i> category, following is a sample for multiple purpose.)			
Project C	1,387,000 (956,000) (431,000)	2,404,000 (1,016,000) (1,388,000)	1. None 2. Replace voltage regulators and excitation equipment in PY.

NOTE: For easier preparation of this form, use "Table" format on MS Word 97 or similar.



**ILLUSTRATION C-2.5b**  
**XXXXXXXXXXXX MAJOR SUBORDINATE COMMAND**  
**JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY   (PY)  

**2. Flood Control**

a. **Reservoirs: Scheduling Reservoir Operations.** The \$       requested in FY   (PY)   supports preparation, review and updating of water control manuals, real-time data collection to monitor hydrologic conditions, and the issuance of gate regulation instructions as necessary at        non-Corps dam and reservoir projects at which the Corps is responsible for flood control or navigation.

<b><u>ESTIMATED OBLIGATIONS</u></b>			
<b><u>(\$)</u></b>			
<b><u>State/Project Name</u></b>	<b><u>FY (PY-1)</u></b> <b><u>TOTAL</u></b>	<b><u>FY (PY)</u></b> <b><u>TOTAL</u></b>	<b><u>Reason for Change</u></b>
<b>Arkansas</b>	30,000	32,000	
<b>Oklahoma</b>	22,000	32,000	
<b>Texas</b>	81,000	82,000	

b. **Channel Improvement: Inspection of Completed Works.** The \$       requested in FY   (PY)   supports inspections at flood control projects constructed by the Corps and operated and maintained by non-Federal interests. The inspections are conducted to determine the extent of compliance with legal standards and to advise local interests, as necessary, of corrective measures required to ensure that project structures and facilities will continue to safely provide flood protection benefits. These projects consist of features such as channels, levees, flood walls, drainage structures and pumping plants.

<b>Arkansas</b>	70,000	62,000
<b>Oklahoma</b>	32,000	32,000
<b>Texas</b>	81,000	82,000

NOTE: For easier preparation of this form, use "Table" format on MS Word 97 or similar.

**ILLUSTRATION C-2.5c**  
**XXXXXXXXXXXX MAJOR SUBORDINATE COMMAND**  
**JUSTIFICATION OF ESTIMATE**

**APPROPRIATION TITLE:** Operation and Maintenance, General, FY   (PY)  

**4. Protection of Navigation**

a. **Project Condition Surveys.** The \$\_\_\_\_\_ requested in FY   (PY)   supports hydrographic surveys, inspections, and studies to determine the condition of navigation channels that do not have any other maintenance work included in the program request and disseminate the information to users of the projects. For the projects that do not require maintenance, surveys are performed at many of them in order to determine the degree of sedimentation so that users can be advised of channel conditions and future maintenance can be scheduled.

<b><u>ESTIMATED OBLIGATIONS</u></b>			
<b><u>(\$)</u></b>			
<b><u>State/Project Name</u></b>	<b><u>FY (PY-1)</u></b> <b><u>TOTAL</u></b>	<b><u>FY (PY)</u></b> <b><u>TOTAL</u></b>	<b><u>Reason for Change</u></b>
Michigan	0	0	
North Dakota	5,000	6,000	
New York	30,000	33,000	

b. **Surveillance of Northern Boundary Waters.** The \$\_\_\_\_\_ requested in FY   (PY)   supports meeting US obligations under provisions of boundary water treaties and other international agreements. Data collection includes current velocity measurements, presence and intensity of ice, water levels, land use patterns and estimating potential damages caused by extreme levels. This information can be used to enhance water level forecasts, develop crises response plans, and provide advance warning to area residents and waterway users of impending floods or ice jams.

Michigan	70,000	62,000
North Dakota	32,000	32,000
New York	81,000	82,000

NOTE: For easier preparation of this form, use "Table" format on MS Word 97 or similar.



SUBAPPENDIX C-3  
OPERATION AND MAINTENANCE, GENERAL  
NATIONAL EMERGENCY PREPAREDNESS PROGRAM (NEPP)

C-3.1. **General.** Through the use of the Evaluation and Corrective Action Program and other similar assessment tools, every effort should be made to ensure that your current state of organizational readiness is maintained in a manner which assures that your capability to support the nation in a national emergency is sustained. *National Emergency Preparedness Program (NEPP)* activities to be programmed are Local Preparedness (Continuity of Operations) 903-510, National Preparedness (primarily the development of Catastrophic Disaster Response Plans (CDRP)) 903-520, Facilities (903-530), the Emergency Water Program (903-540), Continuity of Government (903-550), and NEPP Training/Exercises (903-560). Overall program priorities are:

- Preparedness Plans and SOPs (including CDRP's, COOP, COG)
- Program Management
- Exercises and Training
- Emergency Facilities (EOC)

Field organizations should not anticipate any significant mid-year fiscal relief from HQUSACE (CECS-OP) for personnel or other program costs. MSC's should critically review subordinate district requirements to ensure consistency with overall priorities. If necessary, MSC's should propose reprogramming within the Division to accomplish highest priority efforts.

C-3.2. **General Program.**

a. **National Emergency Preparedness Program (Code 903-500).** This feature series includes those civil administrative, supervisory and procurement activities at each USACE activity that are concerned solely with developing and maintaining a high state of preparedness for national emergency operations of the Corps of Engineers Civil Works functions.

b. **Continuity of Operations (Code 903-510).** This feature series applies to USACE oriented Continuity of Operations (COOP) preparedness planning. Activities in this category include those associated with the identification of specific USACE reconstitution missions, the analysis of required resources, the establishment of organizational and operational procedures, the preparation and publication of contingency plans, and the participation in exercises related to USACE emergency relocation and reconstitution missions as a result of either a natural or manmade disaster. Planning items should include but are not limited to: command succession, identification of alternate relocation/alternate headquarters site(s) (NEPP does not support funding for the acquisition of space), development of appropriate crisis relocation team(s), identification and storage of duplicate emergency files, and other considerations necessary to ensure minimum downtime of the affected organization. This also includes, in conjunction with other appropriate offices, the development of a framework for the individual plans that address the continued operation of Corps civil works projects.

c. **National Preparedness Planning (Code 903-520).** This feature series consists of activities and services which provide the Corps with the capability to ensure that MSC's and districts can provide support for the nation during national emergency events other than reconstitution. Included are those activities associated with the identification of the USACE national emergency missions, the establishment of organizational and operational procedures, the preparation and publication of catastrophic disaster response plans. Also included is the necessary planning coordination with related

Federal, state, and local entities. Efforts include, but are not limited to, the following:

- (1) Technological and other manmade disasters.
- (2) Anti and Counter Terrorism.
- (3) Military Support to Civil Authorities, including the development of catastrophic disaster response plans.
- (4) Command, Control, Communications and Computers (C4).
- (5) Individual Mobilization Augmentee (IMA) Program Management. IMA management associated solely with disaster response and the development and maintenance of disaster related TDAs.
- (6) Port Readiness. Activities associated with maintenance of navigable waterways.
- (7) Resource Management and Administration. Requirements associated with programming, personnel management, and reports.

d. **Emergency Operations Center Support (Code 903-530).** This feature consists of the exclusive use of space which supports Emergency Operations Centers (EOCs) . Included are those activities associated with the operation and maintenance in support of the facilities (rent, supplies, equipment, etc.). This class does not include any labor charges. The EOC will be funded on a joint basis between NEPP and other readiness programs.

e. **Emergency Water Program (Code 903-540).** This applies to requirements of Executive Order (E.O.) 12656 (For Headquarters, U.S. Army Corps of Engineers (HQUSACE only).

f. **Continuity of Government (Code 903-550).** Defined as plans to support Federal Emergency Management Agency (FEMA) and other Federal, state and local agencies in their efforts to reestablish civil authority lost as a result of natural or manmade disaster or an attack on the United States (HQUSACE and only as directed).

g. **Catastrophic Disaster Training and Exercises (Code 903-560).** The development of and participation in catastrophic disaster exercises and training in the inter- and intra-agency arena. The development and participation in evaluation and corrective action programs related to catastrophic disasters will be funded under this class.

C-3.3. **Cost Estimates.** Estimates should include overhead costs for both PY-1, PY, and PY+n. PY-1 figures entered in Illustrations C-3.1 and C-3.2 should reflect any recommended increases from the PY-1 program request.

C-3.4. **Recommended Funding Level.** PY-1 and PY funding levels for all series other than Code 903-520 are expected to be no higher than PY-2 levels, (Code 903-520 funding will be based upon specific scenario based CDRP assignments). MSC's will establish priorities for each major level of effort and identify those areas which cause recommended division/district programs to exceed funding levels defined. Requirements above PY-2 allocations should be specifically addressed. *Salary costs for MSC Emergency Management Chiefs are to be funded under the General Expenses appropriation, not*

*Operation and Maintenance, General, or Flood Control and Coastal Emergencies appropriation accounts.*

C-3.5. **Submission Requirements.** HQUSACE will provide electronic versions for Illustrations to MSC's. MSC's will consolidate district's submissions and forward hard copies to the Office of Security, Plans and Operations (SPO), CECS-OP, not later than 15 June. Although detailed breakdowns of MSC and district programs for PY + n years are not required, districts will provide estimates to division headquarters to justify total programs for PY + n. Questions regarding NEPP program management submissions can be addressed to Chief, CECS-OP, telephone: (202) 761-0453.

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ILLUSTRATION C-3.1  
**NATIONAL EMERGENCY PREPAREDNESS PROGRAM  
FOUR-YEAR PROGRAM**  
(Dollars in thousands)

APPROPRIATION TITLE: Operation and Maintenance, General. FY  
(PY)  
DIVISION OFFICE OR DISTRICT: \_\_\_\_\_.  
(SYMBOL)

Date \_\_\_\_\_  
(Date Prepared)

Class	Title	PY-1	PY	PY+1	PY+2	PY+3	PY+4
510	Continuity of Operations						
520	National Preparedness Planning						
530	Emergency Operations Center Support						
560	Catastrophic Disaster Training/Exercises						
	Totals						

[FOR ILLUSTRATION PURPOSES ONLY -- TYPE AS REQUIRED]

ILLUSTRATION C-3.2  
DIVISION \_\_\_\_\_  
**NATIONAL EMERGENCY PREPAREDNESS PROGRAM**  
**RECOMMENDED PROGRAM SUPPORTINF DATA**  
(Dollars in thousands)

APPROPRIATION TITLE: Operation and Maintenance, General. FY \_\_\_\_\_  
(PY)

DIVISION OFFICE OR DISTRICT: \_\_\_\_\_.  
(Symbol)

Date \_\_\_\_\_  
(Date Prepared)

ACTIVITY	MAJOR AREA OF EFFORT	PRIORITY	PY-1	PY	PY+2
510	Continuity of Operations				
520	National Preparedness Planning				
530	Emergency Operations Center Support				
560	Catastrophic Disaster Training/Exercises				
	Totals				

[FOR ILLUSTRATION PURPOSES ONLY -- TYPE AS REQUIRED]

**ALL PREVIOUSLY PUBLISHED ILLUSTRATIONS FOR THIS CHAPTER (C-3) HAVE BEEN DELETED**





**SUBAPPENDIX C-4  
OPERATION AND MAINTENANCE, GENERAL  
RECREATION FACILITIES AT COMPLETED PROJECTS**

**C-4.1. General.**

a. The construction of new recreation facilities at completed projects is limited to a 50 percent Federal - 50 percent non-Federal cost basis consistent with the Administration's policy of encouraging states and their political subdivisions to share in the development of public recreation facilities. The non-Federal sponsor is required to enter into a cost-sharing agreement with the Corps prior to construction and agree to assume operation and maintenance (O&M), and replacement responsibilities for the completed recreation area.

b. ~~The only~~ An exception to the Administration's cost-sharing policy is for upgrading of existing facilities required to meet urgent sanitation needs in accordance with the provisions of applicable local, state and Federal laws. In this instance, the Corps may develop these sanitation facilities at 100 percent Federal cost. This policy is consistent with the requirements of Executive Order 11514 and 12088, and Public Law 92-500.

c. Construction, renovation and upgrade of recreation facilities may also be accomplished in accordance with paragraph ~~C-2.16~~ C.2.15, Special Recreation Use Fees (SRUF).

**C-4.2. Funding Level** . The following items may be included in the program request in the proper levels:

a. Ongoing cost-sharing developments, which have been previously approved and require reimbursement by local sponsor upon completion, should be given priority in non-deferrable funding level for early completion. This will help to expedite repayment to the Federal Government of non-Federal share of funds already spent for the project (WCC 61513).

b. New start work needed for upgrading sanitation facilities (code 711) only if the upgrading will take place in areas likely to remain open under stringent program and manpower constraints and the sanitary deficiencies would require closing the areas, reducing periods of operation, or reducing levels of use if not corrected (WCCs 61511, 61512, and 61560).

c. Relocation, refurbishment or modernization of sanitary facilities located in consolidated or repaired areas in order to sufficiently handle the changed use patterns (WCCs 61511, 61512, and 61513).

d. Reimbursement of local cost-sharing sponsors who have an ASA(CW) approved agreement prior to the submittal dates specified in this circular (WCC 61513).

e. New starts for cost shared recreation facilities (code 713) may be proposed only if local sponsors indicate in writing their intent to provide 50 percent of the total cost of proposed recreational facilities and any separable recreation lands involved) and operate and maintain the area after completion.

f. Requests for funds for engineering and design activities will be limited to the requirement for activities described in paragraphs C-4.2.a through d.

**C-4.3. Supporting Data**

a. Funding arguments for new recreational facilities must provide the information displayed in Illustration C-4.1. Use of the Illustration format is not mandatory. This information requirement does not apply to SRUF improvements.

b. Requests for funds for any new start cost shared work must be accompanied by a letter of intent from the local sponsor or by complete reference to any existing HQUSACE (CECW-O)/ASA(CW) approved cost-sharing agreements.

**ILLUSTRATION C-4.1**  
**NEW RECREATION FACILITIES AT COMPLETED PROJECTS**  
**(EXCEPT SRUF FUNDED IMPROVEMENTS)**  
**SUPPLEMENTAL INFORMATION**  
(Dollars in Thousands)

COST SHARING (CODE 713 ITEMS) TOTAL:

FACILITIES TO BE PROVIDED IN THE PROGRAM YEAR

1.     Area Name:  
        Description of Work:  
        Total Cost:  
        Allocations To Date:  
        Program Year (PY)  
        Estimate:  
        Balance to Complete
2.     Area Name:  
        Description of Work:  
        Total Cost:  
        Allocations To Date:  
        Program Year (PY)  
        Estimate:  
        Balance to Complete

Etc.

STATUS OF LOCAL COOPERATION FOR COST SHARING PROPOSED IN PY

1.     Area Name  
        Status:
2.     Area Name  
        Status:

Etc.

[FOR ILLUSTRATION PURPOSES ONLY -- TYPE AS NEEDED]

APPENDIX D  
FLOOD CONTROL AND COASTAL EMERGENCIES  
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Test of New Program Formulation Process .....	D-1.2 .....	D-1-1
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TABLES

None

ILLUSTRATIONS

None



APPENDIX D  
FLOOD CONTROL AND COASTAL EMERGENCIES  
(RCS CECW-O-68)

D-1.1. **Applicability.** This appendix includes baseline activities in the Flood Control and Coastal Emergencies (FCCE) appropriation title (96X3125).

D-1.2. **Test of New Program Formulation Process.**

a. To ensure that FCCE resources are efficiently programmed to meet preparedness and operational challenges in an effective manner, HQUSACE (CECW-OE) is testing the development of an Emergency Management Baseline Program Formulation process to replace the current Threat-Based Budget and Funds Allocation process. The new process implements the principles of the Project Management Business Process (PMBP).

b. Baseline requirements are those activities and work items necessary to ensure that your organization is prepared to rapidly, effectively and efficiently respond to disasters during the budget year. Baseline requirements are grouped into four focus areas:

- (1) Program Management
- (2) Planning and Operations
- (3) Training and Exercises
- (4) Communications and Relationships

D-1.3. **Program Guidance.**

a. In lieu of the program guidance normally provided in this EC, divisions and districts will follow the guidance and instructions contained in CECW-OE memorandum, 30 April 2001, "Emergency Management Baseline Budget Formulation for FY 2003 Baseline Budget."

b. Point-of-contact is Ms. Liz Miller, CECW-OE, (202) 761-4605.

APPENDIX E  
GENERAL EXPENSES  
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	Illustration	Page
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SUBAPPENDIX E-1  
GENERAL EXPENSES  
APPLICABILITY

E-1.1. **Appropriation Title.** General Expenses 96X3124

E-1-2. **Purpose.** This appendix provides guidance for development of the General Expenses (GE) Program for Headquarters, U. S. Army Corps of Engineers (HQUSACE), Major Subordinate Commands (MSCs), and other support activities.

E-1.3. **Activities Included.**

<u>Activity Title</u>	<u>Appn</u>	<u>Cat/Class/ Subclass</u>	Guidance Located in Subappendix
Headquarters, US Army Corps of Engineers	905	800	E-2
Major Subordinate Commands	905	800	E-2
<del>Coastal Engineering Research Board</del>	<del>905</del>	<del>800</del>	<del>E-2</del>
Humphreys Engineer Center Support Activity	905	800	E-2
<del>Institute for Water Resources Support Center</del>	<del>905</del>	<del>800</del>	<del>E-2</del>
USACE Finance Center	905	800	E-2



SUBAPPENDIX E-2  
GENERAL EXPENSES  
PROGRAM GUIDANCE

E-2.1. **Program Objective.** The objective of the General Expenses (GE) Program is to provide the minimum acceptable level of definitive policy guidance, executive direction and management, and coordination in execution of the Civil Works Program.

a. **Program.** The General Expenses Program will be developed to provide for accomplishment of the program objective by Headquarters, U. S. Army Corps of Engineers (HQUSACE), Major Subordinate Commands (MSCs), and other support activities. The program will reflect ongoing restructuring initiatives and comply with the Chief of Engineers' 10 Jul 1997 memo to all division commanders, subject: Division GE/OMA Resources, FY 98-03, and the USACE FY 2000 Consolidated Command Guidance (CCG), last updated on 724 December, ~~4999~~2000, as well as any initiatives approved prior to submission of the program.

b. **Labor Resources and Funding.**

(1) **Labor Resources.** Estimates of labor resources for the PY-1 and PY will reflect the most efficient utilization of personnel necessary to achieve the program objective. MSCs will be staffed at levels authorized by the Chief of Engineers' memo and the FY001 CCG cited above, or subsequent guidance if appropriate. Executive direction and management workyears are constrained by GE Program funding; Congressional appropriations language, such as the limitations on the use of other Title I funds; and Administration initiatives to reduce the size of "headquarters" activities and the overall federal workforce.

(2) **Labor Funding.** Funding requests for the PY will include base labor costs as of 1 October of PY-2, plus projected inflation based on Class 1 rates shown in Table 1 of the main part of this EC. These rates reflect national and locality pay raises, plus agency contributions for employee benefits. In preparing estimates for overtime, analyze the use of overtime to ensure that it is prudent and efficient; explore all reasonable alternatives to overtime, such as improved scheduling; and assure that adequate approval, monitoring, and audit procedures are in place to avoid abuses. Total labor funding requirements should be adjusted to include incentive awards as well as projected hire lag. Costs for formerly ceiling exempt employees in the Student Educational Employment Program (formerly Summer Employment Youth and Youth Opportunity Back to School programs), and costs for uniformed GE Program-funded military officers will be included in estimating total personnel compensation costs.

c. **Non-labor Resources and Funding.** Estimates of non-labor resources for the PY-1 and PY will cover non-labor features listed in Illustration E-2.1. Use Object Class Definitions contained in paragraph ~~35.5~~ 83.7 of OMB Circular A-11 dated July ~~4999~~2000. They can be accessed and downloaded from the following internet site:

<http://www.whitehouse.gov/OMB/circulars/a11/s83.pdf>.

Funding requests will reflect inflation based on Class 2 rates shown in Table 1 of the Main Part of this EC. If your PY request includes inflation greater than that based on the PY Class 2 rate, you must explain why in your justification statement. Cost growth above Class 2 rates will not be considered without the explanation. All funding entries will be **rounded to the nearest thousand dollars**.

E-2.2. **Supporting Data.** The PY GE Program request will comprise a transmittal letter, program justification statement, and two justification summaries.

a. **Transmittal Letter.** The program request will be transmitted by a letter signed by the MSC Commander/Director of Separate Office/Activity, or authorized delegate. This transmittal letter will confirm compliance with this guidance and the accuracy and adequacy of the request.

b. **Program Justification Statement.** The program justification statement will explain any extraordinary requirements above inflation, and the impacts of not funding them. If you are planning additional restructuring, consolidation or downsizing initiatives or collocation with another Corps activity, include justification showing estimated costs and savings, and your funding timetable, with anticipated PY costs broken out between civil and military functions. If your request exceeds your latest FTE guidance for the PY, you must justify the positions individually and explain why these requirements cannot be accommodated within the current guidance. The name, office symbol, and telephone number of the preparer will be provided in the narrative or transmittal letter.

c. **Funding Justification Summary (Illustration E-2.1).** This is a summary of GE Program funding. The PY-2 funding total equals the amount of the work allowance actually received in the PY-2, plus prior year carryover, including any adjustments up to the time of your program submission. Data will be broken down by feature/subfeature, as shown. The sum of amounts shown under object classes 11 and 12 equals the salaries and benefits for the General Expenses Program staff reflected under Title III of Illustration E-2.2.

d. **Labor Justification Summary-- (Illustration E-2.2).** This is a summary of GE Program labor, expressed in FTE workyears and full-time permanent (FTP) positions. Item III equals the sum of Items I and II, while Item IV reflects all non-GE Program labor, broken out by civil and military functions. These categories are further broken out by direct-funded (funded through appropriations to the Corps) and reimbursable (funded by other agencies, e. g., Department of Energy, Air Force, etc.). Item V is the sum of Items III and IV, which equals the total labor assigned to the activity.

E-2.3. **Submission Requirements.** Supporting data, described above, will be submitted in hard copy to the Director of Resource Management (CERM-ZA), WASH DC 20314-1000, and by electronic mail to, CERM-B (Attn: Ms. Judy Champion) by the date shown in the schedule of the Main Part of the EC. An Excel workbook, with separate worksheets for the two illustrations will be provided to you via e-mail and **must** be used in order to assure consistency in the program submissions. If there are problems complying with these submission requirements, contact CERM-B by e-mail or phone at (202) 761-1404820.

ILLUSTRATION E-2.1  
GENERAL EXPENSES  
FUNDING JUSTIFICATION SUMMARY  
(\$000)

MSC/Other Activity: \_\_\_\_\_

Date: \_\_\_\_\_

<u>Feature/ Subfeature</u>	<u>Title</u>	<u>Work Allowance PY-2</u>	<u>Assumed Budget PY-1</u>	<u>Budget Request PY</u>
11 01	FTP Civilian Pay	_____	_____	_____
11 03	Other than FTP Pay	_____	_____	_____
11 05	Other Pay (Overtime, Holiday, Cash Awards)	_____	_____	_____
11 07	Military Officer Pay	_____	_____	_____
12 01	Civilian Benefits	_____	_____	_____
12 02	Military Benefits	_____	_____	_____
13 01	Severance Pay	_____	_____	_____
<b>Subtotal OC 11/12/13</b>		_____	_____	_____
21 01	Commercial Air	_____	_____	_____
21 02	Division Airplane	_____	_____	_____
21 03	Per Diem	_____	_____	_____
21 04	Other	_____	_____	_____
22 00	Transp. Things	_____	_____	_____
<b>Subtotal OC 21/22</b>		_____	_____	_____
23 01	GSA Rent	_____	_____	_____
23 02	Other Rent	_____	_____	_____
23 03	Communications	_____	_____	_____
23 04	Utilities	_____	_____	_____
<b>Subtotal OC 23</b>		_____	_____	_____
24 00	Printing & Reproduction	_____	_____	_____
25 01	Advisory & Assist. Svcs	_____	_____	_____
25 02	Training, Other Svcs ( <b>O.C. 25.1</b> )	_____	_____	_____
25 03	Purch. Goods & Services from other Gov't	_____	_____	_____
25 04	O&M of Facilities Costs	_____	_____	_____
25 05	Admin. Support ( <b>O.C. 25.3</b> )	_____	_____	_____
25 06	F&A Services ( <b>O.C. 25.3</b> )	_____	_____	_____
25 07	O&M of Equipment	_____	_____	_____
<b>Subtotal OC 25</b>		_____	_____	_____
26 00	Supplies & Materials	_____	_____	_____
31 00	Equipment	_____	_____	_____
32 00	Lands and Structures	_____	_____	_____
<b>TOTAL ALL OBJECT CLASSES</b>		_____	_____	_____

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ILLUSTRATION E-2.2  
GENERAL EXPENSES  
LABOR JUSTIFICATION SUMMARY

MSC/Other Activity: \_\_\_\_\_ Date: \_\_\_\_\_

	ACTUAL PY-2			ESTIMATE PY-1			ESTIMATE PY		
<u>Title</u>	<u>FTE</u> <u>Work</u> <u>Years</u>	<u>Total</u> <u>FTP</u> <u>Posn</u>	<u>Salaries</u> <u>and</u> <u>Benefits</u>	<u>FTE</u> <u>Work</u> <u>Years</u>	<u>Total</u> <u>FTP</u> <u>Posn</u>	<u>Salaries</u> <u>and</u> <u>Benefits</u>	<u>FTE</u> <u>Work</u> <u>Years</u>	<u>Total</u> <u>FTP</u> <u>Posn</u>	<u>Salaries</u> <u>and</u> <u>Benefits</u>
I. GE-funded civilians	_____	_____	_____	_____	_____	_____	_____	_____	_____
II. GE-funded military	_____	_____	_____	_____	_____	_____	_____	_____	_____
III. Total GE-funded staff	_____	_____	_____	_____	_____	_____	_____	_____	_____
IV. Remaining Staff	_____	_____	_____	_____	_____	_____	_____	_____	_____
a. Military functions:									
Direct-funded	_____	_____	_____	_____	_____	_____	_____	_____	_____
Reimbursable	_____	_____	_____	_____	_____	_____	_____	_____	_____
b. Civil functions:									
Direct-funded	_____	_____	_____	_____	_____	_____	_____	_____	_____
Reimbursable	_____	_____	_____	_____	_____	_____	_____	_____	_____
V. TOTAL MSC/SFOA STAFFING	_____	_____	_____	_____	_____	_____	_____	_____	_____
(Sum of III, IVa. & IVb.)									

APPENDIX F  
REGULATORY PROGRAM  
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## ILLUSTRATIONS

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APPENDIX F  
REGULATORY PROGRAM  
(RCS-CECW-B-13)

F-1.1. **Applicability.** This appendix includes all activities under the Regulatory Program appropriation title (96X3126).

F-1.2. **Activities Included.**

Activity Title	Category
Permit Evaluation	100
Enforcement and Resolution	200
Studies	300
Other Regulations	400
Environmental Impact Statements	500
Administrative Appeals	600

F-1.3. **Program Guidance.** Resources required by the division should be programmed under General Expenses. However, one Level 1 regulatory package should be submitted to cover costs for a single GS-13 appeal reviewer at division. It will not be submitted under a selected district but as a division package. Data will be transmitted electronically following guidance contained in the Civil Works Operation and Maintenance Automated Budget System Manual. Procedures for preparing input, for generating reports, and for updating data are also included in that manual. Division regulatory managers must rank all packages. Rankings of Level 2 packages are especially important. MSC's must insure that level 2 submissions reflect uniform and consistent levels of work effort among the districts and that submissions at Level 2 accurately reflect the required level of service defined in Level 2.

F-1.4. **Types of Activities (projects) and Work Functions.** Packages under the regulatory appropriation should be submitted for up to six activities (projects). Packages will be further identified according to one of three work functions. The five regulatory activities are Permit Evaluation-category 100, Enforcement 200, Studies-300, Other navigation regulations-400, Environmental Impact Statements (EISs)-500, and Administrative Appeals-600. The work function code will now be used to identify these activity (project) packages as 15.1 (Branch Labor/Operational Costs), 15.2 (Contracts, Major purchases, Miscellaneous) or 15.3 (Support by others). This will create packages that will be identified by both activity (project) and work function. (For programming purposes these regulatory activities are always treated as projects).

F-1.5. **Activities (Project) Categories.** The regulatory program is divided into six activity categories:

a. **Permit Evaluation (100).** Includes all costs related to the review and evaluation of permit applications under Section 9, 10, 103 and 404 as well as environmental assessments supporting this review. Cultural resource investigations, jurisdiction determinations, public hearings, and other activities related to application evaluation are included as are general permit development and consideration of activities under general permits. Cost for support items such as automated permit tracking systems or other computer or micrographic support and equipment purchases should be identified in description/argument.

b. **Enforcement (200).** Includes all costs related to compliance inspections, administrative civil penalties for compliance, ground and aerial surveillance, unauthorized activities and jurisdiction

determinations related to enforcement actions, and follow-up on violations. Nationally, about 20 to 25% of district resources is allocated for enforcement; except in austere years, when less is allocated.

c. **Studies (300).** Includes all costs related to studies such as jurisdiction studies (actual jurisdiction determinations are included under permit evaluation), mapping, wetland studies, shoreline inventories, and collection of data for environmental databases. No packages for studies may be included where a specific study is not identified and described.

d. **Other Regulations (400).** Includes all costs related to administration of the miscellaneous regulations such as danger zones and restricted areas, plus review of Section 402 applications.

e. **Environmental Impact Statements (EISs) (500).** Includes all costs required for preparation of EISs when Corps is lead or cooperating agency. Costs for all new project-specific EISs will be submitted as EIS packages under the Branch Labor work function category since review will occur in the regulatory branch. ~~No costs for project-specific EISs will be submitted under Support by Others unless the EIS review was initiated prior to FY98 and the review will continue into FY 2000.~~ Some costs for programmatic EISs may require support from other offices and may be submitted under the Support by Others work function category. All EISs must be identified as either ongoing or projected and the percent probability of the EIS being required should be indicated. Costs associated with the review of non-Corps EISs are included under Permit Evaluation, unless the review is of an in-depth nature requiring more than \$2,000. No packages for EIS may be submitted where the EIS is not specifically identified.

f. **Administrative Appeals (600).** Costs to support one grade 13 appeals reviewer for regulatory decisions, including travel and related costs at division offices and jurisdiction determination appeals costs at districts.

#### F-1.6. **Work Function Categories.**

a. **Branch Labor/Operational Costs (15.1).** Costs required to pay salaries and benefits of branch personnel (except contracted personnel) and normal office operational costs to support these personnel. Included are: overhead costs not separately charged as under paragraph c below, rent, utilities, communications, ADP, travel, training, reproduction, supplies, etc. New, major purchase or contracting requirements for office services not currently in use (or expansion of such contracts), and over \$25,000 should be shown under 15.2. Renewal of existing contracts, for office services ONLY, need not be listed separately under 15.2. Other, mission support type contracts, must be listed under 15.2, whether they are new or renewal of existing contracts. Generally, essential labor and operational costs will be submitted in levels 1 and 2; enhancement levels will be submitted under level 3. Under output measures, the number of FTEs supported by the funds in each 15.1 package will be required (see below). Some packages may provide enhancement levels of 15.1 office services without actually supporting FTEs; a zero may be entered for these packages. Comparisons will be made with past cost per FTE submissions. Each 15.1 package submitted will also be identified according to the five regulatory activities. Note that ADP/RAMS costs should be submitted as one or more separate packages.

b. **Contracts, Major Purchases, Miscellaneous (15.2).** All contracts, including financial agreement with other agencies, in support of the regulatory mission (as opposed to normal office support contracts) should be shown here. Only expansion of office service contracts over \$25,000 need be shown here as defined in the previous paragraph for 15.1. Examples of work to be shown as 15.2 are: aerial photography; inspection contracts; cost sharing agreements with states or other Federal agencies; contractual personnel; personnel from other agencies paid with regulatory funds; data gathering contracts; major purchases of new ADP, micrographic or other office systems, including Regulatory Automated Management System (RAMS), or major equipment purchases. Wherever possible, these

packages can be listed under a single activity rather than splitting between two or more activities, (e. g., \$50,000 for aerial photos could be shown as a single enforcement package if they will be used more for enforcement than for permit evaluation). Package size limitations in levels 2 and 3 may result in 15.2 packages having to be divided into two or more packages regardless. Note that ADP/RAMS costs should be submitted as one or more separate packages.

c. **Support by Others (15.3).** Costs for support by those organizations that direct charge to the regulatory program for their assistance on an "as needed" basis. Packages will need to be submitted for any of the five activities that are appropriate. Engineering, planning, counsel support, and IM each should be submitted as a separate package. Support work may also have to be divided between levels 1, 2 and 3.

F-1.7. **Funding Levels.** District regulatory program requirements should be submitted in the following levels, which will be tied to level 1:

a. **Level 1.** Packages should be submitted with total level 1 requirements not exceeding total FY ~~1999~~ 2000 district obligations. Packages may be submitted for all categories, except administrative appeals for jurisdiction determinations, which should be submitted in level 2. Level 1 should include a balanced, fully operational, albeit reduced, program. This ceiling **MUST** be used. It is expected that some critical work will have to be submitted in Level 2.

b. **Level 2.** The total of all cumulative packages (including level 1) should allow the district to provide (but not exceed) the following levels of service and performance: (1) complete 70% of Individual permits within 120 days, (2) maintain current (mid ~~2000~~ 2001) level of service for "all actions." (3) Site inspect 90% of standard individual permits, (4) Site inspect 30% of all permit actions that result in written authorization, (5) provide a level of enforcement that is approximately 20% of the total level 1+2 cost. NOTE: Districts which are currently exceeding any of these levels of service may have to put some dollars in level 3 to maintain current performance since only funds required to achieve, not exceed, the service outlined above are allowed in Level 2. For example, a district currently completing 80% of Individual permits in 120 days or spending 25% of their current budget on enforcement would be expected to show some funds for their current levels of effort in these areas in level 3. Funding arguments should indicate differences or similarities with current (PY-2 or PY-1) levels of effort. Packages of \$100,000 or less are preferred, but not required especially in large districts (those with FY ~~1999~~ 2000 obligations near \$4 million), or where large permit evaluation or enforcement packages are required to meet the performance levels above. Packages for new FTEs (not authorized in mid FY ~~2000~~ 2001) should be identified as new FTEs in the package description. Only packages for ongoing EIS's may be submitted in level 2. One package for Jurisdiction Determination appeals may be submitted as the LAST PACKAGE in level 2 but it should not exceed 3% of total level 1+2 costs. Packages for studies in level 2, including SAMP's or other watershed plans, may be submitted only if they are essential to meet the performance requirements above or are otherwise mandated by outside or higher authority will provide significant benefit to management of the program workload.

c. **Level 3.** Additional packages may be submitted for level 3. There is no dollar limit on total level 3 funding requests. Costs for projected EIS's should be submitted. Packages for high priority SAMPS or other watershed management plans are encouraged. Note that packages for current labor should be submitted as highest priority work in level 3 in cases where a district may be currently exceeding the performance requirements in level 2 and thus cannot include some labor in Level 2. Package size in level 3 should follow the same guidelines as level 2.

d. **Program Goals.** See Level 2.

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F-1.8. **Output measures.** All 15.1 packages with labor require that the number of regulatory branch FTEs covered by the package be entered as an output measure. Use of the FTE output measure is optional for 15.2 package as it will often not be appropriate. No FTEs need be entered for 15.3 work as no regulatory branch FTEs are affected. Enter in tenths, i. e., enter 1 for .1; enter 11 for 1.1. It is likely that some of the 15.1 packages in level 3, for office operations without labor costs, will have zero entered for the FTE output indicator. *IMPORTANT:* In order to insure that labor packages are funded, districts should be certain that the appropriate number of FTEs is reflected; a zero will result in a package being ranked below most labor packages and possibly not being funded. Division Offices should check FTE output indicators thoroughly.

F-1.9. **Points of Contact.** Questions pertaining to policies, procedures, or format of the Regulatory Program activity should be referred to HQUSACE (CECW-OR), Mr. Frank Torbett, (202) 761-4618. Questions regarding ADP input for the same activity should be referred to HQUSACE (CECW-BC), Mr. Dennis Kern, (202) 761-4133.

F-1.10. **Submission Requirements.** The suspense date for submission of required materials from divisions is ~~45 June 2000~~ 2 July 2001.

F-1.11. **Five-Year Program.** A five-year regulatory program without dollar constraints will be developed based on resource needs and projected work effort. A dollar figure only will be submitted for each of the five regulatory categories for PY+1 through PY+4. Figures should be reasonable and should assume a continued emphasis on wetlands protection and meeting the 60- and 120-day goals. Increased contracting, where appropriate, should be assumed.

F-1.12. **Funding & Staffing Summary.** Each district should prepare and submit electronically to its division office the funding and staffing information in Table F-1. Divisions should forward these to CECW-OR electronically and also prepare and submit a division-level Table F-1. The division table will sum district amounts for each category and level (cumulatively; not by district). Divisions should add the division office amounts for Appeals to the summary table.

TABLE F-1					
DISTRICT/DIVISION _____					
FUNDING & STAFFING SUMMARY (\$000/FTEs)					
Activity	Level				
	1	2	3		
	Total	Increment	Total	Increment	Total
<b>Funding</b>					
Permit Evaluation					1,850
				230	
			1,620		
	1,400	220			
Enforcement					690
				150	
			540		
	440	100			
Studies					200
				50	
			150		
	100	50			
Other Navigation Regulations					0
				0	
			0		
	0	0			
EISs					60
				0	
			60		
	60	0			
Appeals					50
				20	
			30		
	0	30			
Total					2,850
				450	
			2,400		
	2,000	400			
<b>Staffing</b>					
All					21.5
				2	
			19.5		
	17	2.5			

Example

APPENDIX G  
REVOLVING FUND  
PLANT REPLACEMENT AND IMPROVEMENT PROGRAM (PRIP)  
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APPENDIX G  
PLANT, REVOLVING FUND  
PLANT REPLACEMENT AND IMPROVEMENT PROGRAM (PRIP)  
(RCS CECW-D-1)

**G-1.1. Purpose and Scope.** This appendix provides policy and general procedural guidance for Plant Replacement and Improvement Program (PRIP) development. To provide a uniform approach for program development and justification, the various plant items have been grouped into categories. Guidance for the electronic transmission of automated data for submittal of limited program recommendations is contained in the 1130 series of Engineer Regulations (ERs). Procedures for preparing input, for generating these reports, and for updating data are also included in the ER 1130 series. From time to time, additional detailed guidance will be provided by CERM-B in supplemental memoranda.

**G-1.2. Program Development Concepts.**

a. **Categories.** All plant items should be identified by category. Detailed definitions for the categories and subcategories can be found in Chapter 15, ER 37-2-10, Accounting and Reporting Civil Works Activities. The categories and subcategories authorized for use with this program submission are as follows:

Category/Subcategory Title	Category/Subcategory Code
Land	00
Buildings	05
Structures	10
Aircraft	20
Dredges	30
Other Floating Plant	40
Total Mobile Land Plant	50
Passenger Vehicles (Suspended)	5V
Other Mobile Land Plant	5X
Total Fixed Land Plant	60
Communications Equipment	6C
Other Fixed Land Plant	6X
Tools, Office Furniture, and Equipment	70
Software	80
Total Automatic Data Processing Hardware	90
Computers and Peripherals	9A
Computer Aided Design and Drafting	9D
Water Control Data Systems	9W

b. **Major and Minor Items.** For programming purposes all items of plant will be classified as either major or minor items. Major Items will be further classified as either new or continuing items.

(1) **Major Items.** New Major Items consist of those items which exceed HQUSACE authority and which require submittal through the Assistant Secretary of the Army (CW) to the Office of Management and Budget (OMB) and the Congressional Committees on Appropriations for concurrence. The limit of Chief of Engineers authority is \$700,000. However, for purposes of the FY 03 program submission, all new requirements estimated to cost over \$525,000 will be treated as New Major Items. Continuing Major Items consist of those acquisitions costing more than \$700,000 which were previously submitted to and concurred in by OMB; and authorized by the Congressional committees. An update shall be submitted on all continuing major items with scheduled ~~expenditures~~ obligations in FY 02 and/or FY 03. In the absence of Congressional action on the current year appropriations, the President's current year program will be used along with the assumption that the program request for continuing items and new starts will be enacted by 1 October of the current year.

(2) **Minor Items.** For FY02 and FY 03, minor items are those items which exceed the capitalization threshold of \$25,000 but which do not exceed the Chief of Engineers authority level.

G-1.3. **Program Guidance.** Major Subordinate Command (MSC) Commanders will develop and submit a total PRIP for their command to include district requirements. Tabulation of program requirements will reflect the total MSC program and will show both MSC and district priorities for each item of plant. Each item of plant (major and minor) shall be submitted with full justification. This justification shall be submitted on ENG Form 4613-R for major items and ENG Form 4943-R for minor items. Electronic facsimiles of these forms are acceptable. In addition, major item new starts proposed for FY 03 shall be accompanied by economic and affordability analyses as specified in CECW-BA Memorandum dated 10 March 94, Subject: Revised Submittal Requirements for Plant Replacement and Improvement Program (PRIP) Major Item New Starts. A ~~three~~ five year PRIP plan will be submitted annually (~~15 October~~) showing the current year, the program year, and the follow-on ~~two~~ five out-years using ENG Form 1978-R or an approved electronic facsimile. ~~The three year PRIP plan~~ shall be updated only after the mid-year review at the end of the second fiscal quarter or whenever significant changes occur. A copy of the semiannual update and changes shall be forwarded to CERM-B not later than 15 April.

G-1.4. **Submission Requirements and Dates.** See Table 2 of the main part of this EC.

APPENDIX H  
AUTOMATION COSTS  
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## APPENDIX H AUTOMATION COSTS

H-1.1. **Background.** House Report 103-135, June 17, 1993, accompanying the Energy and Water Development Appropriations Bill, 1994, directs the Corps to "provide separate and distinct data for automation costs" in future program requests. The basis for this request is the Committee's belief that "the cost attributable to the development and implementation of automated programs of the Corps of Engineers is entirely unreasonable." In accordance with this direction, the Civil Works Directorate has provided Congress with a display of estimated automation costs with its FY95-02 program submissions. These displays have divided automation costs into three main categories: hardware, software (automated information systems), and personnel.

For FY02, the primary sources of data on estimated hardware costs were Plant Replacement and Improvement Program (PRIP) three-year plans (for minor items), PRIP major item new start requests and continuing major item updates, and the Information Technology Investment Portfolio System (ITIPS) which is used for planning, programming and tracking information technology (IT) investments, and includes funding requirements and histories. Personnel costs were retrieved, by activity, from the Automated Civilian Personnel System (ACPERS).

H-1.2. **Program Development Concepts.** For FY03, the Corps will continue to provide a display similar to that of prior years, dividing automation costs into the categories of hardware, software and personnel.

For FY 02, we grouped hardware acquisition costs in terms of the following IT classifications:

- automated engineering tools;
- office automation and other general purpose;
- communications;
- and automated information systems.

Additionally, we distinguished between items proposed for PRIP acquisition (i. e., items supporting more than one project or program and costing more than \$25,000), also displayed under the Revolving Fund section of the program; and items costing less than \$25,000, and expensed, or acquired using specific study, project or program funds.

For FY02, AIS were grouped as Corps-wide or local. Corps-wide systems were further grouped under functions supported, such as, engineering, construction, and operations and maintenance functions. Local systems were grouped by MSC.

H-1.3. **Program Guidance.** ITIPS must be maintained up-to-date and reflect your best estimate of what actual requirements will be because it is being used as the data source for the estimate of our automation costs which is going to Congress. The PRIP Three Year Plan remains primarily a planning tool, but since the data in it is used to prepare our automation costs estimate it is important that it too reflect your best estimate of what actual requirements will be.

H-1.4. **Submission Dates and Requirements.**

a. **Information Technology Investment Portfolio System.** In the case of the ITIPS, which is continually available for updating, the most important data elements for the Civil Works automation budget

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are ~~FY 02 asset acquisition plans implicit within the RSMS\_ASSET tables and the FY 03 fund source, operation and support costs, in-house operation and support FTEs, and program costs to complete, and in-house FTEs to complete~~ requirements in the AIS\_BUDGET tables. ~~Other information which may have a bearing on the FY 02 costs should be included in the "Comments" field.~~ Please ensure that the ITIPS is updated continually. (In accordance with ER 25-1-2, the functional proponent has Life Cycle Management of Information Systems (LCMIS) responsibility for any AIS. Although this party may not be responsible for entering data into the ITIPS, it is responsible for the accuracy of the data.)

b. **PRIP Three-year Plan.** A new PRIP Three-year Plan must be submitted annually on ~~45 Oct 30 Jul~~, and should be kept up-to-date. ~~reviewed for possible revision no later than 15 April. However,~~ a A revised plan can be submitted at any time. Please ensure that your current PRIP Three-year Plan contains accurate FY 03 estimates for Categories 80 (Software) and 90 (Hardware).

APPENDIX I  
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)  
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APPENDIX I  
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)

I-1.1. **Applicability.** This appendix provides program guidance and procedures for all activities in the Formerly Utilized Sites Remedial Action Program (FUSRAP) appropriation.

I-1.2. **Multi-year Program.**

a. **Overview and Objectives.** The major objectives of the FUSRAP program are to evaluate and remediate sites identified by the Department of Energy (DOE) as suitable for remediation under FUSRAP. Each FUSRAP division's multi-year program should be developed and conducted in such a manner that projects are completed as soon as possible and at the lowest cost consistent with cleanup criteria that are fully protective of human health and the environment, responsive to regulatory and community interests, and in accordance with land use requirements.

b. **Program Ceilings.** Illustration I-1.2 provides a listing of ceilings for FY 03-12. These ceilings reflect the decisions reached during the March 2001, regarding costs and schedules, as part of the FY 2002 program development process, program development meeting in July 1999, FY 00 reprogramming actions, cost and schedule changes as of April 2000 recommended by FUSRAP divisions/districts, and adjustments for revised Office of Management and Budget (OMB) ceilings increases, starting in FY 03.

c. **Ceiling Baseline Level.** ~~(PRISM LVL: C)~~ Each FUSRAP division will submit a multi-year program consisting of continuing FUSRAP sites ~~or~~ and potential new sites which have ~~already~~ been designated as eligible for cleanup under FUSRAP by the Department of Energy. This multiyear program should be consistent with the outyear MSC program ceilings in July 1999 which was modified to reflect cost and schedule changes as of April 2000 recommended by FUSRAP divisions/districts, allocation of FY 00 funds, the project completion dates provided for the record to Congress in conjunction with the defense of the FY 01 program, and the program ceilings in in Illustration I-1.2. For potential new sites, only requirements through FY 04 should be included.

d. **Recommended Level.** Each FUSRAP division will submit a multi-year program consisting of continuing FUSRAP sites and potential new sites which have been designated as eligible for cleanup under FUSRAP by the Department of Energy. This program should reflect funding requirements to achieve the most efficient execution, within the division's capability to accomplish the work, without regard to MSC program ceilings in Illustration I-1.2. For potential new sites, only requirements through FY 04 should be included.

~~e.~~ **Capability Level.** Each FUSRAP Division will submit a multi-year program consisting of continuing FUSRAP and potential new sites which will complete all sites as soon as possible, without regard to efficiency, considering only the division's capacity capability to accomplish the work. For potential new sites, only requirements through FY 04 should be included.

I-1.3. **Prioritization.** Your baseline multiyear program should be developed in accordance with the following priorities:

- demonstrable threat to public health, safety, or the environment;
- potential threat to public health, safety or the environment;
- Federal Facility Agreements (FFA) or other legal/contractual/regulatory requirements;

- completion of ~~the project~~response actions;
- efficient design/construction schedule;
- completion of current stage (RI/S, EE/CA, &c);
- local support; and
- potentially responsible party issues.

#### I-1.4. Program Phases.

##### a. Pre-Construction/Implementation.

(1) **Preliminary Assessment (PA).** A PA is a limited-scope investigation to collect readily available information about a site and its surrounding area. The PA is designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA also identifies sites requiring assessment for possible emergency response actions.

(2) **Site Investigation Inspection (SI).** SI is an on-site inspection to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

(3) **Remedial Investigation (RI).** RI is the process undertaken to determine the nature and extent of the problem presented by a release which emphasizes data collection and site characterization. The remedial investigation is generally performed concurrently and in an interdependent fashion with the feasibility study.

(4) **Feasibility Study (FS).** FS is a study undertaken to develop and evaluate alternatives for remedial action.

(5) **Engineering Evaluation/Cost Analysis (EE/CA).** This document is prepared in the case of a non-time critical removal action. ~~The document takes the place of the RI/FS that is prepared for a full remedial action.~~ The EE/CA is an analysis of removal alternatives and must satisfy environmental review and administrative record requirements, and provide a framework for evaluating and selecting alternative solutions.

(6) **Record of Decision (ROD).** The ROD is a document prepared in accordance with the requirements of 40 CFR 1505.2 that provides a concise public record of the agency's decision on a proposed action. It identifies alternatives considered in reaching the decision, the environmentally preferable alternative(s), factors balanced by the agency in making the decision, and mitigation measures and monitoring to minimize harm.

(7) **Remedial Design (RD).** RD is an engineering phase that follows the Record of Decision when technical drawings and specifications are developed for subsequent remedial action.

- ##### b. Remedial Action (RA).
- RA is the actual construction and implementation of a remedial design that results in long-term site cleanup.

#### I-1.5. Program Considerations.

a. Alternative Program Year (PY) and outyear requirements should be based on estimated end of PY-2 allocations, and estimated end of PY-1 allocations, constrained to MSC ceiling shown in Illustrations I-1.2 and I-1.3. In particular nNo assumptions should be made regarding additional PY-21 work allowances which might be provided to individual projects, beyond the amounts in excess of MSC ceilings shown on Illustrations I-1.2 and I-1.3. For potential new sites, only requirements through FY 04 should be included. Cost estimates and schedules should to the greatest extent possible be consistent with cost estimates for a baseline remediation in the 90-day report to Congress, but in every instant must be consistent with the cost estimate prepared in accordance with CECW-B/CEMP-R memorandum dated 4 Feb 98, subject: Formerly Utilized Site Remedial Action Program (FUSRAP) Project Baseline Cost Verification.

b. ~~Costs estimates and schedules presented to Congress should be considered an upper limit and where possible the remediation should be concluded sooner and at lower cost.~~

eb. Estimated remaining cost to complete should be based on cost estimates prepared in 1998 as required by CECW-B/CEMP-R memorandum dated 4 Feb 98, subject: Formerly Utilized Sites Remedial Action Program (FUSRAP) Project Baseline Cost Verification, estimates of likely cleanup scenarios in draft feasibility studies/proposed plans, or in accordance with selected alternative from the Record of Decision. Cost estimates, regardless of the basis, shall be updated to October of the program year minus 1 (PY-1) price levels and should not include an allowance for inflation. Project costs will be adjusted at HQUSACE, in accordance with inflation factors provided by the Office of Management and Budget.

#### I-1.6. Submission Requirements.

a. **Justifications.** Supporting data for each site in the FUSRAP Division s program will consist of a Justification Sheet, see Illustration I-1.1. ~~The Justification Sheets must be typed on standard size paper, 8 inches by 11 inches, should be right and left justified Word 6.0/95, or less, or WordPerfect 6.0, or less, documents at 6 lines per inch using landscape 12 pitch font; Prestige Elite is the preferred typeface. The typed material must be confined to 6 inches vertically and 10 inches horizontally, leaving one half inch margins on the left and right sides and 1 inch margins on the top and bottom. The appropriation title and division must be shown as the first line in the body of the first page. Do not underline any headings. The district must be identified under the site name. Justifications are to be submitted electronically as Word 6.0/95, or less, or WordPerfect 6.0, or less, documents to HQUSACE CECW-BA. See main body of EC, item 11, Submissions, for presentation specifications.~~

b. **Alternative PY and Outyear Programs.** Alternative programs, ceiling, recommended and capability, will be submitted as Excel spreadsheets, see Illustration I-1.3. ~~ADP. PRISM has been modified to accommodate FUSRAP data program entry.~~

(1) As appropriate, add lines for additional operable units, when there is reasonable evidence that remediation will be required (but identify additional operable unit in such a way that they are distinguishable from each other and the primary effort at the site, e.g. ground water, soil under railroad, building 53 demolition, etc.)

(2) Revise FY 01 (BY-2) to match current estimate of final FY 01 allocations and revise FY 02 (BY-1) to match current estimate of final allocations not to exceed total allocation available to the MSC.

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ILLUSTRATION I-1.1  
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM  
JUSTIFICATION

APPROPRIATION TITLE: Formerly Utilized Sites Remedial Action Program, Fiscal Year 2003

Division

STATE

	Total Estimated Federal Cost \$	Allocation Prior to FY 2002 \$	Allocation FY 2002 \$	Tentative Allocation FY 2003 \$	Additional to Complete After FY 2003 \$
Site Name	200,000			100,000	100,000
District					

Furnish a brief description of the site, including location, size, ownership, and nature of contamination. Cite any matters known to be of concern to Congress. Describe briefly the general the general scope and key areas of concern that were or are being addressed, ~~probable solutions, and the work to be performed in the budget year.~~ Provide any pertinent information concerning coordination with Federal and state agencies, and local communities. Identify Potentially Responsible Parties (PRP), if any, and status of PRP actions. Indicate significant items of work accomplished by the Corps in immediate past and current year. Explain significant changes (increases or decreases) from cost to complete shown on justification sheet for PY-1.

Describe what FY 2002 funds will be used for, and what work is scheduled with requested FY 2003 funds.

~~State month and y~~Year when remedial action the project is scheduled for completion. ILLUSTRATION I-1.2

**PROGRAM CEILINGS**  
(\$K)

MSC	Fiscal Year											
	PY-2	PY-1	PY	04	05	06	07	08	09	10	11	12
<b>LRD</b>	40,661	32,940	45,000	45,000	38,000	40,000	58,000	93,000				
<b>MVD</b>	55,004	52,470	51,000	56,000	54,000	51,000	48,000	44,000				
<b>NAD</b>	44,335	54,590	46,000	44,000	58,000	62,000	52,000	25,000				
<b>Total</b>	140,000	140,000	142,000	145,000	150,000	153,000	158,000	162,000	166,000	170,000	175,000	

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ILLUSTRATION I-1.3

**FUNDING**  
\$K

Project	Funding															Cost to Complete (FY02 to End)	Completion (as of Mar 01)
	Allocated through FY00	Actual 01	02	03	04	05	06	07	08	09	10	11	12	13 and beyond	Total		
Ashland 1	47,880	6,598	650	0	0	0	0	0						75	55,203	725	FY02
Ashland 2	28,912	0	0	0	0										28,912	0	
Seaway	5,134	1,330	1,420	2,926	13,022	132	92	0	0	284					24,340	17,876	FY05
Linde	52,292	22,799	11,650	17,500	4,700	13,000	2,000	0	0	0	0	0	0	0	123,941	48,850	FY06
Bliss & Laughlin	1,654	0	0	0	0										1,654	0	
NFSS	18,622	5,105	10,500	10,729	7,391	3,550	476	14,616	74,563	70,672	70,900	2,506	599	4,529	294,758	271,031	FY11
Luckey	11,849	2,600	2,000	11,060	16,500	16,500	16,500	16,500	2,300	200	200	0	0	32,779	128,988	114,539	FY08
Painesville	7,250	340	5,250	500	0	0	0	0	0	0				357	13,697	6,107	FY02
other	3	0	0												3	0	
Dayton 3	80	70	0														
Dayton 4	0	70	0													-70	
Harshaw	40	60	470	385	1,028	1,239	15,750	18,449	121	40	0	0	156	0	37,738	37,638	
Scioto	25	350	0	0	0	0	0	0	0	0	0	0	0	0	375	0	
Dayton 1	117	35													152	0	
Dayton Warehouse	117	30													147	0	
Guterl	40	60													100	0	
SLDA	0	185	1,000	0	0	0	0	0	0	0	0	0	0	0	1,185	1,000	
<b>Subtotal</b>	<b>174,015</b>	<b>39,632</b>	<b>32,940</b>	<b>43,100</b>	<b>42,641</b>	<b>34,421</b>	<b>34,818</b>	<b>49,565</b>	<b>76,984</b>	<b>71,196</b>	<b>71,100</b>	<b>2,506</b>	<b>755</b>	<b>37,740</b>	<b>711,413</b>	<b>497,696</b>	
SLAPS	96,092	29,758	26,970	26,237	24,979	23,000	3,000	500	422						230,958	105,108	FY06
SLDS	71,866	17,600	17,500	16,000	16,000	6,000	4,234	500	200						149,900	60,434	FY06
HISS/Latty	44,362	14,000	6,000	5,000	10,000	16,056	17,040	20,412	7,030	500					140,400	82,038	FY08
SLAPS VPs	33,029	2,600	2,000	2,500	1,500	4,000	20,500	20,035	29,000	6,736	0				121,900	86,271	FY09
Madison	2,204	0													2,204	0	
IAAP	40	75													115	0	
<b>Subtotal</b>	<b>247,593</b>	<b>64,033</b>	<b>52,470</b>	<b>49,737</b>	<b>52,479</b>	<b>49,056</b>	<b>44,774</b>	<b>41,447</b>	<b>36,652</b>	<b>7,236</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>645,477</b>	<b>333,851</b>	
CE	5,807	500	1,240	600	3,100	3,000	7,000	12,000	5,000	200					38,447	32,140	FY08
Shpack	3,063	900	1,815	1,000	0	0	0	0	0	0					6,778	2,815	FY03
Ventron	25	0													25	0	
Colonie	110,462	8,035	13,330	10,000	2,249	1,500	1,500	500	500	0					148,076	29,579	FY06
Maywood	161,955	13,000	27,170	28,000	25,000	24,961	25,735	25,587	14,260	500	500	500			347,868	172,213	FY08
Wayne	100,672	8,000	5,000	200	200	200	200	128	0	0					114,600	5,928	FY02
Middlesex	70,733	2,000	800	2,140	2,295	9,765	4,072	250	200	0					92,255	19,522	FY06
Dupont	3,705	1,000	1,000	1,400	7,748	2,805	500	500	0	0					18,658	13,953	FY05
WR Grace	5,597	2,900	4,235	1,150	250	10,500	15,500	5,500	500	500	0				46,632	38,135	FY07
<b>Subtotal</b>	<b>462,019</b>	<b>36,335</b>	<b>54,590</b>	<b>44,490</b>	<b>40,842</b>	<b>52,731</b>	<b>54,507</b>	<b>44,465</b>	<b>20,460</b>	<b>1,200</b>	<b>500</b>	<b>500</b>	<b>0</b>	<b>0</b>	<b>813,339</b>	<b>314,285</b>	
<b>Total</b>	<b>883,627</b>	<b>140,000</b>	<b>140,000</b>	<b>137,327</b>	<b>135,962</b>	<b>136,208</b>	<b>134,099</b>	<b>135,477</b>	<b>134,096</b>	<b>79,632</b>	<b>71,600</b>	<b>3,006</b>	<b>755</b>	<b>37,740</b>	<b>2,170,229</b>	<b>1,145,902</b>	
<b>Cap (adjusted down for inflation)</b>		140,000	140,000	137,597	136,147	136,475	134,888	134,977	134,102	133,153	132,133	131,802	131,364	130,826			